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ABSTRACT

Developed by educators with the help of an advisory group, this handbook was prepared for use with a film and slide presentation at a series of national conferences designed to familiarize decision makers with the nature and advantages of career education. Each of the four chapters of the handbook addresses a single question. In the first chapter, the concept of career education is defined and its components examined. The second explores the sources of dissatisfaction with education. A variety of programs throughout the country are described in the third chapter and a conceptual model of career education is offered. The fourth and longest chapter provides guidelines in 10 action steps for use in implementing the program. Implementation must occur at two levels--the policy level and the instructional level, and state leadership bodies must take the responsibility for supporting implementation. No matter what the level, there are ten action steps which must be undertaken in four phases: (1) define the goals and sell the program, (2) organize resources, (3) implement the program, and (4) evaluate, improve, expand and maintain. These ten steps are described in some detail. (CD)

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CAREER EDUCATION

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A HANDBOOK FOR IMPLEMENTATION

Career Education: A Handbook for Implementation

U.S. Department of Health, Education and Welfare

Elliot L. Richardson, Secretary

Office of Education

Sidney P. Marland, Jr., Commissioner

U.S. DEPARTMENT OF HEALTH,
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FOREWORD

Few concepts introduced into the policy circles of American education have ever been met with such instant acclaim as career education. The immediate driving force behind the concept is clear: a new commissioner of the U.S. Office of Education (USOE) has declared it among the highest priorities of his administration. In addition, he has allocated much of the discretionary moneys available to him through various education appropriations to implementing the concept.

However, commissioners of education have had priorities in the past but have not always been outlived by them. The educational administrators at the state and local levels cannot be expected to reallocate resources at their disposal; classroom teachers cannot be expected to vary teaching guides, habits, and technology without some assurance that the new approach will be a lasting one.

There is assurance in the fact that most of the national education associations have taken note of and formally welcomed and endorsed the concepts of career education. There is more assurance of durability in the fact that career education, though new in terminology and in impetus, is in reality the culmination of long-term trends and extensive experimentation. Though no comprehensive career education system has been available, the component parts from which one can be derived are thoroughly tested.

Commissioner of Education Sidney P. Marland, Jr., is owed a debt of gratitude for providing the driving force for implementation. However, the fact is that career education is a concept whose time has come—foreordained by a confluence of significant forces. It responds to dissatisfaction with the status quo. It promises to contribute to the amelioration of social and educational ills. It coalesces the findings of experimentation.

This handbook seeks to provide answers to four questions:

1. What are the key concepts of career education?
2. Why is career education needed?
3. What are examples of career education in practice?
4. What are the appropriate strategies for implementation for a school system interested in the concept?

The handbook has been prepared for use in connection with a series of conferences conducted throughout the nation to familiarize decision makers with the nature and advantages of career education. It accompanies a film which illustrates the concepts and a slide-tape presentation which summarizes USOE efforts at implementation. A grant from USOE to the Maryland State Board of Education authorized preparation of these materials through a subcontract with the Olympus Research Corporation. The handbook is disseminated in connection with conferences conducted under the same grant by the National Academy for School Executives of the American Association of School Administrators. James L. Reid, Assistant Superintendent in Vocational-Technical Education of the Maryland State Department of Education, served as director of the entire project. The handbook was written by Rupert N. Evans (University of Illinois), Kenneth B. Hoyt (University of Maryland), Edward F. Mackin (Olympus Research Corporation), Nancy M. Pinson (Maryland State Department of Education), and Garth L. Mangum (University of Utah) who has final editorial responsibility.

This handbook has profited from the comments and constructive criticisms of an advisory group of the above plus James L. Reid, Warren Smeltzer, and E. Niel Carey (Maryland State Department of Education) and Mary Allen (American Vocational Association). It has been shepherded with the constructive advice of Michael Russo and William Berndt (USOE). However, the full and complete responsibility for its contents rests with Garth L. Mangum and the Olympus Research Corporation.

Its purpose is straightforward and important. If the audiovisual presentations have been persuasive, there should be a desire to incorporate career education into the curricula of local school systems. But "wanting to" and "how to" are different considerations. Chapter 1 records the concepts illustrated in the audiovisual presentations; Chapter 2 explores the reasons that career education is a welcomed concept; Chapter 3 traces the development of the concept and provides some conceptual and practical examples; and Chapter 4 contains the real purpose of the handbook: once we are convinced that career education is a good idea, what is a practical strategy for getting it adopted and implemented at the state and community level?

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CHAPTER I

Career Education in Concept

There are nearly as many definitions of career education as there are definers of it. Most definitions are descriptions of the applications rather than the concepts themselves. Pending the examples in Chapter 3, the following are among the key concepts of career education:

1. Preparation for successful working careers shall be a key objective of all education.
2. Every teacher in every course that has career relevance will emphasize the contribution that subject matter can make to a successful career.
3. "Hands-on" occupationally oriented experiences will be utilized as a method of teaching and motivating the learning of abstract academic content.
4. Preparation for careers will encompass the mutual importance of work attitudes, human relations skills, orientation to the nature of the workaday world, exposure to alternative career choices, and the acquisition of actual job skills.
5. Learning will not be reserved for the classroom but learning environments for career education will also be identified in the home, the community, and employing establishments.
6. Beginning in early childhood and continuing through the regular school years, allowing the flexibility for a youth to leave for experience and return to school for further education, including opportunity for upgrading and continued refurbishing for adult workers and including productive use of leisure time and the retirement years, career education will seek to extend its time horizons without beginning and without end.

7. Career education is a basic and pervasive approach to all education, but it in no way conflicts with other legitimate education objectives such as citizenship, culture, family responsibility, and basic education.

From these concepts it should be apparent that career education is not to be conceived as a time segment of education such as elementary, secondary, or post-secondary education, or as a separate subject matter such as vocational education or academic education. Yet it encompasses all of these and more. It is a basic part to all education. It provides a specific objective—successful career performance—which is practicable, achievable, and measurable and not exclusive of other legitimate objectives. It treats all honest and productive human activity as honorable and legitimates preparation for it. It requires identification of those attributes which make for lifetime career success, whether as employee or employer, laborer or professional. It involves analysis of the entire educational process to design appropriate timing and ways in which the identified attributes can be furthered. It denies to the school any monopoly as a learning environment, yet gives the school a key role in identifying and coordinating all learning environments which can further the career goal.

Career education at present is best described as a concept in search of a definition, and there are many candidates for official designation. We prefer the following definition which seems to be in no serious conflict with developing usage: Career education is the total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values in their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.

Basic Components

The five basic components around which these concepts are organized may extend understanding of them. The following paragraphs reflect the order in which they are experienced by most individuals rather than any indication of their relative importance.

The first component recognizes and capitalizes upon the interrelationships among the home, the family, the community, and the occupational society. The home itself is a work setting. It is also the basic consumption unit of the products of the economy and the services of the community. Basic attitudes toward work and productivity are developed in the home. Family experiences are a major influence on occupational aspirations. The school can identify and point up the meaning of the seemingly ordinary experiences from which lifelong attitudes are formed. Parents can be brought to recognize the impact of their attitudes upon the personal value systems of their children. Students can be helped to make wise personal decisions concerning their roles as family members, as potential parents, and as members of the outside world of careers and service. Girls and women need particular help in preparing for and carrying out the complicated dual role of homemaker and careerist, which is increasingly their lot. A wide array of potential vocational skills can also be experienced and tried out in the home—food service, interior decorating, clothing design, construction and mechanical skills, etc.—if these opportunities are used constructively.

A second component, a clear responsibility of the school, expects every classroom teacher in every course at every level to emphasize, where appropriate, the career implications of the substantive content they seek to teach. This component cuts both ways, providing more effective job skills while giving meaning and relevance to otherwise abstract academic subject matter. Its goal is to make clear the importance and contribution of such content as preparation for making a living. Hopefully, such an emphasis will provide positive educational motivations that will help make school a meaningful experience for all students. Career implications are inherent in learning experiences from the preschool to graduate school and beyond. Yet this can be accomplished in ways that act in concert with all other sound educational objectives.

The third component is a comprehensive career development program which involves the active cooperation and participation of both school and nonschool personnel. It includes the provision of a variety of means, both cognitive and experiential in nature, for helping students understand and reflect upon the values of a work-oriented society. In addition, this component includes systematic and continuing assistance to students in the educational and occupational choices each must make in the

process of his career development. This assistance must encompass helping students to understand themselves, to understand the educational and occupational alternatives available to them, and to choose wisely, based on all such understandings, in ways that fully protect individual freedom of choice. Finally, this component includes helping students implement the choices they have made in ways that will bring personal satisfaction to students and benefit to society.

The fourth component of career education is represented by vocational skill training that will provide students with specific competencies required for successful entry (or reentry) into the occupational world. The goal of this component is to maximize the quality, appropriateness, variety, and levels of vocational skill training from which the individual can choose. Such training must be demonstrably related to existing and anticipated occupational openings and organized in ways that will allow training opportunities to change with the needs of the occupational society.

A fifth component emerges because to achieve the others requires the cooperation and positive involvement of private and public employers and labor organizations. The classroom is, in many ways, the most sterile of possible learning environments—useful for abstract concepts but with little opportunity to demonstrate "real world" applications. This component includes the provision of work observation, work experience, and work-study opportunities for students and for those who educate students in public school settings. It also involves provision of consultive and advisory services to school officials regarding the nature and needs of the occupational society. It includes training programs conducted in the business and industrial community as well as cooperative school-government business-labor programs designed to assist students in making a successful transition from school to work. But it goes further than that. A knowledge of the economy and its workings, of production processes, of human interaction, of the role and impact of technology and of the complex and growing problems of the physical environment can best be learned as they are experienced. The coordination of such learnings must be accepted as the joint responsibility of formal education and the business-labor-industrial community.

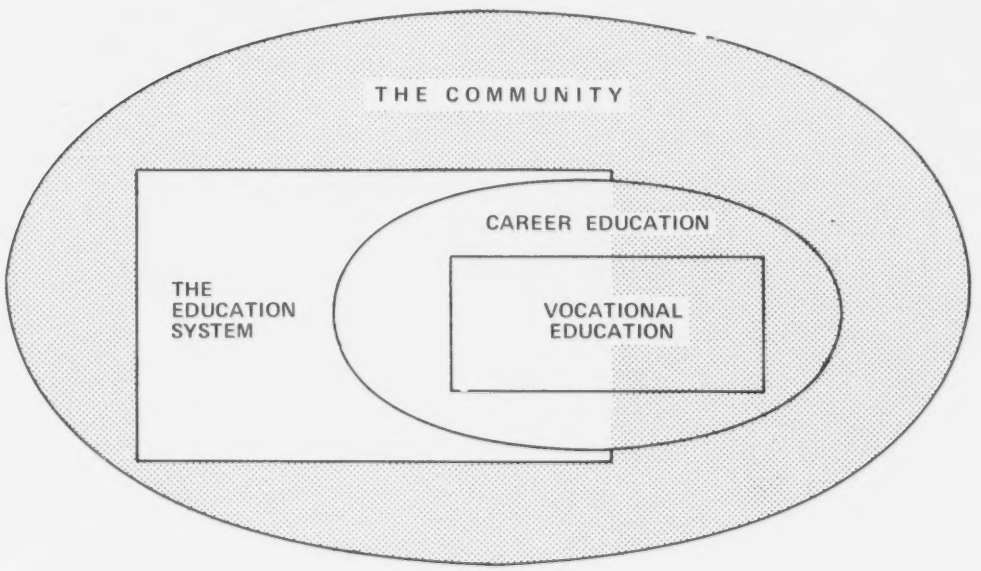
The term "career education" seems to have generated two contrasting confusions. Some have thought it nothing but

another name for vocational education. Others see in it a threat to absorb all of education into a single-focused occupational pursuit. These two misconceptions are combined in those who fear that career education is but a device to "vocationalize" what they value as "general" or "academic" or "liberal" education. These misconceptions and fears must be dispelled. If the primary purpose of a "liberal" education is to help a student discover himself in relationship to his society, how can the role of work and careers not be included? On the other hand, there is much of value in education which is not and should not be career oriented. As an imagery, it is as if a variety of monitors were installed within the education system. One representing the career objective would comb the entire education experience to identify those segments which could usefully contribute to career success. Other monitors would have the same assignment for citizenship, culture, family life, self-awareness, and other education objectives. None would compete, all would cooperate, and each objective would be strengthened by pursuit and achievement of the others. At the same time, much of career education will occur outside the formal education system (as, indeed, much of education does).

It may be useful to visualize the relationships among vocational, career, and all education and between the formal education system and the community by the illustration of Figure 1.

FIGURE 1

Career Education's Place in Education



The definition and components of career education should be attractive concepts, but they pose a myriad of real world problems for the practitioners of public education. Later chapters will explore these obstacles. But first, in order to demonstrate a need for change in current education practice, it is necessary to review the present social and education scene and identify the reasons for current dissatisfaction with education's product and methods.

CHAPTER 2

Sources of Dissatisfaction

The reasons that career education may be a concept whose time has come are that: (1) it has emerged at a moment when dissatisfaction with educational practices and outcomes are at a peak and (2) it promises to attack and improve some of the apparent sources of that dissatisfaction. Whether it is successful will depend upon whether the diagnosis has been correct, the prescription proper, and the treatment competent.

A useful exploration of the demand for educational reform must identify the reasons for that dissatisfaction, test their reality, and assess their relationship to what career education can reasonably be expected to offer. It must be recognized that: (1) most of the dissatisfaction directed toward education is in reality frustration with social ills for which the schools are only partly to blame and to the solution of which they can make only modest contributions; (2) many of American education's problems are the consequences of success, and its strengths outweigh its weaknesses; and (3) the atmosphere is permeated with demands for educational reform, and career education must be viewed in its relationship to them.

Educational and Social Ills

The frustrations which appear to permeate the consciousness of the American society are remarkable. A nation whose economy has produced wealth beyond the imagination of any people in history and has disseminated it more broadly and equally than wealth has ever been distributed appears to find little satisfaction in that relative affluence. A nation at the peak of its power is disillusioned by the uses it has made of that power. Some of these frustrations are unjustified, growing from

over-expectations which could not be realized; others are valid regrets for sins of omission or commission. Few are caused solely by education, but most could be helped by its appropriate applications. Career education is specifically applicable to several.

Many of our frustrations are consequences or penalties of success. We have pursued economic growth until the average American has available to him individually from 20 to 40 times the goods and services available to the average Asian, African, or Latin American. Although poverty by U.S. standards would be affluence elsewhere, that is no comfort to the 25 million American poor who compare with the affluent majority they can observe rather than the invisible poorer about the world. For the more affluent among the rest of us, our consciences may subliminally plague us because we know that reallocation of a fraction of our annual average *increase* in income could wipe out poverty within a handful of years. In fact the launching of the minimal "war on poverty" in the first place was motivated by the fact that, in that pre-Vietman year 1964, it was seen necessary to cut taxes and increase public expenditures by several billion dollars in some combination each year to keep the economy growing.

Those only moderately above the poverty line are frustrated, not by conscience, but by the fact that they still have not achieved the standard of living that television informs them is their right to expect. The down trodden historically have been notoriously docile. Violent revolutions occurred only when people were tempted and then frustrated by real gains tantalizingly near but just beyond reach, or when they were threatened with loss of the little they had. In the United States and abroad, it is the former, not the latter, that poses the "revolution of rising expectations."

The United States finds itself at the cutting edge of a worldwide revolution in technology, living standards, and values. It is not necessary to accept everything written about it to agree that we are the first to enter a postindustrial age. The primary characteristic of the economic stage which preceded the industrial revolution was the involvement of most of the labor force directly or indirectly in agriculture. The Civil War marked the close and perhaps the immediate reason for the demise of that period in this country. The primary determinant of an

economy's productiveness in that preindustrial agrarian world was the fertility of the soil. It was a natural resource-based economy in which men adapted to their environment without attempting to change it and in which the primary source of income, wealth, and power was land ownership.

It was replaced over the following 50 years by the industrial stage in which most of the labor force was engaged in the production and dissemination of manufactured foods. Man now used the machine, both to augment his meager physical strength and to change the environment when it did not suit him. In that world, capital resources were the most important, and the "shakers and movers" were the owners of industrial capacity.

The term "postindustrial society" has become so intertwined with spectacular projections of wealth and technological impacts that "realists" often reject its use. Nevertheless, an economy in which white-collar workers have exceeded those with blue collars for more than 15 years, and in which the number providing services, governing, and processing information is now surpassing those engaged in producing and disseminating both foods and fibers and manufactured goods can hardly be described accurately much longer as industrial. Already some outlines of this postindustrial society are becoming clarified. Human resources are becoming the critical ones. People's wealth, power, and prestige in society are more and more determined by what they know and what educational credentials they have rather than what they own. Both the farm and the factory are subject less and less to owners and more to professional managers. Highly trained people move freely among posts in education, government, and industry, and the boundaries between those sectors and between the private and the public sectors increasingly blur.

But such is the human condition that growing wealth and technological power does not promote general happiness. There is no reduction in the number of problems, though there is a change in their nature. Education has been a moving force in some of these developments; its importance has been vastly augmented; it has not changed in pace with the changes to which it has contributed.

The ramifications of this transition from preindustrial through industrial to postindustrial are pervasive, and only those

most relevant to the need for career education can be treated here. Children who absorbed the accumulated "how to do it" lore of agriculture while working beside their fathers were one step removed from the industrial "world of work," but at least had some idea of what "Dad did at the plant." Increasingly the world of work is some incomprehensible place to which both parents go daily with little notion available to children of what occurs there. While the alternative career choices have multiplied, noninstitutionalized exposure to those choices may even have narrowed.

Accompanying that change has been a shrinkage of the family structure from the extended family of the preindustrial society to the industrial nuclear family which has increasing difficulty maintaining unity and stability in the emerging postindustrial setting. It has been in the home that the child developed his basic attitudes toward work. Structural changes in the family could be expected to impinge upon the work ethic. For the labor market, one of the most deleterious impacts has been the lack of a working breadwinner as a role model in the broken homes which are the childhood and youth environments of increasing numbers.

Also characterizing the transition in the way people earn their livings is the increasing specialization of the urban society, which has largely eliminated the economic role of both youth and the aged. It was coincidental that exploding numbers of youth struck the labor market during the 1960s, just as the postindustrial trends were becoming obvious. Stretching longevity and a greater proportion of aged in a society still following a policy of earlier and earlier retirement are phenomena likely to continue through the foreseeable future.

Specialization within a sophisticated technology cannot but make the worker's means of livelihood more vulnerable to change. And that sophistication increasingly means that most, not just a few, will require some formal training.

Urbanization has been made possible by the application of that technology to agriculture, freeing human resources for the economy's newer thrusts. For most the result has been higher material incomes, but the result has not always been positive for those attempting to compete in an urban labor market with a deficient rural education.

Urbanization brings the advantages of close human interaction but also the irritations of congestion. Only in part is that congestion a product of population growth. The source of the remainder is the inherent tendency to congregate in the most economically attractive areas—attractive, that is, within the incentive system of a private enterprise economy which fails to adequately measure social costs. In the wealthiest of societies, the threat is not starvation but lost brotherhood, as populations compete irritably for space.

Among the many paradoxes of our society is the fact that the traditional work ethic encouraged development of a technology in pursuit of profit which produced abundance, and that abundance in turn threatens the work ethic which was its source. Beyond the creature comforts, the consequences of wealth appear to be a revolution of rising expectations among the poor, a growing sense of ennui among the well-to-do, the threat of consumerism to the environment, and the temptations of power in the political process.

Those with low incomes occasionally lash out in frustration at their inability to grasp wealth seemingly just out of reach. Those who are the middle income group are frustrated because they cannot afford the standard of living that the mass communications media intimate is the norm. Even those in the upper 5 percent of income earners consider themselves only "middle class."

The last can take pride in having pursued material wealth and achieved it, but their offspring, having never been without it and deprived of the challenge of achievement, find in it little satisfaction. All three groups are "up tight" about education. The evidence is that the poor are far from apathetic but just do not know how to help their children at home or to manipulate the political system which maldistributes education resources. Those with earnings actually in the middle of the income distribution—around $8,000 to $10,000—rightly see education as a prerequisite for upward mobility. Without recognizing it, the higher income groups are "up tight" because they are the first wealthy people in history with no way of guaranteeing wealth for their children. Those whose high incomes accrued to their personal talents and specialized knowledge can offer no other bequest than similar education and training to their children.

None of these social ills are exclusively the fault of education. Yet we expect education to make major contributions to solving them all. We have been experiencing both overexpectation and underachievement. Education cannot solve all of these problems, but it can do more than it has. Before moving on to an inventory of education's specific shortcomings, it is useful for perspective to note its preeminent achievements.

Achievements of Education in the United States

It is only in the past few years that education has been seen by the general public as a means of solving most of the problems outlined above. At the turn of the century, three generations ago, only a small majority of wild-eyed reformers believed that schools could or should teach much more than the elements of reading, writing, and arithmetic. As education has been assigned the solution of more and more problems, it has experienced a revolution of rising expectations. As more and more has been accomplished, the public expects still more, and expects the "still more" to happen faster and better. Our rising expectations for education tend, too often, to obscure our view of the very real achievements.

The achievement which is the easiest to document is the enormous increase in the amount of education. Currently, 60 million are enrolled in some portion of the education system. The average American worker has 12.3 years education, putting even those who go no farther than high school in a minority position. In 1953 only 48 percent of the high school students finishing in the top quarter of their class entered college. As long ago as 1960 that figure had reached 80 percent. Whereas in 1955 only 58 percent of those who started high school graduated; by present trends, 80 percent are expected to do so in 1975. Higher education enrollments more than doubled in less than a decade, growing from one-third to 45 percent of the 18 to 21 age population in that period. The result of all these factors has been that the total cost of education has risen enormously, from $3 billion to $66 billion per year over the last 30 years. The proportion of the gross national product devoted to education has more than doubled, from 3.4 to 7.1 percent, in the last 20 years. No other nation can even approach this record.

The rapid increase of man's knowledge has imposed burdens on the school which appear to have been met rather well. Elementary school children often have a far better working knowledge of ecology, science, mathematics, philosophy, nutrition, and economics than their parents. One of the major causes of communications problems between youth and adults lies in the different language and values held by youth as a result of the school's success in teaching independent thinking. It may even be that unwillingness to accept a parent's moral values stems from demonstration that his factural and scientific knowledge is too fallible to be a dependable guide.

Not only have we expected the school to teach more about each of the traditional school subjects, but we frequently add subjects to the school curriculum. The school is a better teacher of driving than parents; the reduction of automobile accidents has important social and economic effects, so a new subject is added to the school curriculum. Society expects similar benefits from such new subjects as sex, drug and consumer education. Subjects taught traditionally in colleges, such as economics, sociology, psychology, statistics, and calculus, are taught now in high schools and even in elementary schools, and the results generally have been excellent. Colleges report that students are better prepared than they have ever been, and introductory college courses gradually are being dropped in recognition of these qualifications. In 1950, for example, calculus was offered as an intermediate or advanced course by most college math departments. By 1970 it became an introductory course. It is no accident that great scientific breakthroughs and their engineering applications have occurred in the nation where the commitment to education has been the greatest. Where nations have pursued a narrow range of scientific endeavor through production of a limited number of specialists, their achievements, though impressive, have been narrowly constricted. In the United States they have been widely pervasive.

One of the early successes of the schools was the education of immigrants and the children of immigrants who quickly learned our language and perhaps too quickly accepted our values and discarded their own. One can argue whether this sudden change in language and values was desirable, but there is no doubt that the school was able to do almost exactly what society expected it to do.

Similar successes have been recorded within the limited range of vocational programs which have been taught in school. Graduates of the vocational curriculum in high schools have unemployment rates that are about one-third as high as those of nonvocational graduates. When graduates from equal socioeconomic backgrounds are compared, the vocational graduates also have higher job satisfaction and higher annual earnings. These advantages are not short-lived, but persist throughout the period covered by thorough longitudinal studies which have now continued for ten years.

Needed Basic Changes

In spite of the very real accomplishments of schools in this country, serious weaknesses remain. The schools have done quite well what we have wanted them to do, but we have not insisted that they do a number of things which are important to society. Career education is a means for remedying some of these deficiencies. In fact, introducing career education without these weaknesses being remedied could foreordain its failure.

Individualized Instruction

As the schools have enrolled a larger and larger proportion of the school age population, it has been inevitable that the range of student interests and abilities has increased markedly. Even in the elementary school, the inclusion of migrants, handicapped, and poor has widened the range of student abilities. The amount of individualized instruction required to cope with this increased range of need has not increased correspondingly.

In the elementary school the average class size is about 30, and a high school teacher may work with 150 students each day. Ideally, these students should be proceeding at different rates, each learning material which has been adapted to meet his special interests and abilities; but we have not developed economical ways to let this occur. In contrast, a college football team often has 15 coaches, and factory-operated automobile repair schools have six trainees per instructor.

One way of individualizing instruction is to provide a variety of instructional programs in which students can enroll. In

1900, 80 percent of high school graduates went on to college; almost all of these received bachelor's degrees. There was only one curriculum in high school—it prepared everyone for college. Today 50 percent are prepared for college, but only 20 percent get a bachelor's degree. Around the time of World War I, a limited amount of vocational training began to be included in the high school. This was gradually increased in breadth, but at no time has there been room for more than 25 percent of the students. The third addition to the high school was the general curriculum. Having no real goals, it enrolls about 25 percent of the high school graduates, but it also produces, according to limited evidence, 70 percent of the high school dropouts, 88 percent of the Manpower Development and Training Act trainees, and more than 78 percent of the inmates of correctional institutions.[1]

In the elementary and the junior high schools there is still only one curriculum which is essentially designed to prepare students to enter college. It is a system of "school for schooling's sake," with each level of schooling preparing primarily for the next stage until graduate school ends the process. In effect, then, the first eight to ten years of school are designed to prepare everyone for a goal which will be achieved by less than one-fifth of them. One way of looking at this is to say that there has been an 80 percent failure rate. It is probably more factual to report that young people recognize the reality that only 20 percent of the existing and foreseeable jobs require a baccalaureate degree. It is the education system, prodded by the parents, which has not recognized labor market realities. Of course, higher education has other objectives than the simple employment ones, but there is little conclusive evidence that these are better achieved.

The Nature of the Learning Environment

It is difficult to imagine a more sterile learning environment involving fewer stimuli than the traditional classroom. It is expensive to construct and maintain, yet it can serve little purpose other than a convenient location to impart

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[1] David J. Pucil, *Variables Related to MDTA Trainee Success in Minnesota* (Minneapolis: University of Minnesota, 1968), p. 29. Joel Galloway, *Males in Process of Incarceration in the Illinois Penal System* (unpublished 1971 study at University of Illinois).

abstract or rote learning. Yet the world outside the classroom is replete with learning situations, most of which are without cost to the learner.

Like many social institutions, education has been organized and structured with deep roots in the past. There has been a tendency to view education as something apart from the rest of life—as a process that only occurs in classrooms from 8:00 a.m. to 3:00 p.m., nine months of the year. While we espouse individual differences and learning styles, education continues to be organized according to age and specific grade levels, subject matter is structured into neat little packages pretentiously labeled as disciplines, and learning is divided into a set of uniform 40- to 50-minute time blocks that begin and end in response to a bell. When nonschool interests suggest that the schools provide instruction in drug dangers, environmental management, or consumer education, there is an understandable reluctance to add another separate subject to an already overcrowded curriculum.

This reluctance on the part of educators will persist if the schools continue to be structured to impose artificial constraints of time and space and a limited body of knowledge. The goal for third-grade teachers will be preparing students for the fourth grade, and senior high school English teachers will measure their effectiveness according to the number of their students who successfully pass the grammar and spelling part of the college entrance examination. Achievement of academic credentials is accepted as a proof of education's worth without demonstrating its contribution to economic, social, and personal performance. So long as one perceives of education within the framework of fixed time, limited space, and specialized subject matter, changes in curriculum will be difficult to introduce because every new community need will not be viewed as an opportunity to relate specialized subjects to a topical and relevant issue. On the contrary, contemporary problems will be viewed as another effort to overload the curriculum and shorten the time available for instruction of what is and has been taught in the past. New problem areas and new information will be seen as a fad and not as an opportunity to provide relevance.

Unfortunately, local and state educational systems have become so big and contain so many parts, it is not uncommon

to lose focus on what is essential in education: the learning environment. Federal aid to education, state boards of education, school administrators, facilities, and teacher certification may all be necessary to a well-run educational system. They are still paraphernalia in relation to what counts most—that is, what happens between students and teachers.

It is the learning environment that stimulates discovery and encourages curiosity. That is where the lights go on or where they get turned off.

Segregation

It is now generally accepted that racial segregation interferes in a major way with learning, especially in metropolitan areas. But of at least equal importance are socioeconomic segregation and segregation based on sex. Generally speaking, the college preparatory curriculum enrolls students of higher socioeconomic status than does the vocational curriculum, while the general curriculum students are more likely to be from an intermediate range of economic backgrounds. In some states and in some large cities, separate vocational high schools tend to segregate students socioeconomically. The Coleman Report suggests that such segregation has a greater effect in retarding learning than does racial segregation or the quality of facilities and instruction. The reasonably good results achieved by separate vocational high schools may mean that the absence of a general curriculum from such schools nearly offsets the disadvantages created by socioeconomic segretation. Even in "comprehensive" high schools, socioeconomic segregation can be created by keeping vocational and college preparatory students in separate wings of the school and refusing to allow them to enroll in common courses.

Segregation based on sex tends to reflect in vocational education the segregation which exists on jobs. Most business, distributive, health occupations, and home economics students are female. Most industrial and agriculture students are male. Where this segregation is based on student choice, it can perhaps be tolerated. But in far too many cases it is based on rigid exclusion of one sex by teachers and counselors.

Failure to Explore the Work Ethic

Teaching values in public education programs is a difficult task. Because values are by nature controversial, most schools have stopped teaching them, except for a few academic values which relate to cheating on tests, giving incorrect information for school records, plagiarism, and the like. A major casualty has been consideration of the work ethic with its emphasis on quality of work, promptness, diligence, and similar characteristics of the "good" worker.

Preceding stages of economic history have produced value systems to provide needed incentives. An economy based on land, the original source of ownership of which was usually conquest, could be justified only by some form of divine right. A work ethic which explained social status as the "will of God" and promised rewards in the hereafter to the peasant, serf, or slave most docile in the present served nicely. Early capitalism needed incentives for frugality, self-denial, investment, and productivity—what we came to know as the Protestant ethic.

To teach the work ethic in its original form would cause problems for society and for the school. The present system is better described as consumerism than capitalism, and old-style frugality could wreck it. A part of the youth culture rejects the work ethic completely. The industrial work ethic is eroding, and a postindustrial work ethic has yet to develop. But it seems indefensible to fail to teach youth that employers do value the work ethic and that major violations of it will lead to discharge. This failure of the school becomes more serious as the home and the peer group seem less and less able to teach the needed lesson. The high rate of job changing and unemployment which characterizes dropouts and nonvocational graduates before about age 25 may be largely explained by this failure. Evidence is strong that attitudes are formed most efficiently early in life. Therefore, the work ethic must at least be introduced in early childhood and elementary education programs.

Early Childhood Education

It is not clear just why children traditionally have begun school at age six. It may be related to the age at which they were mature enough to walk several miles to school. We now know that

children can profit immensely from formal instruction at much earlier age and that if this instruction has not been provided, ability to learn is impaired. Much of this early learning involves development of attitudes, including attitudes toward learning and work.

Most early childhood education now takes place in the home. In middleclass homes, where there is a great deal of individual attention from members of the family supplemented by a wealth of instructional materials such as toys and books, it is usually effective. In many economically deprived homes the father may be absent, books and toys are less available, and the attitudes which are taught may be disfunctional in the broader society.

Most formal instruction for very young children is provided by privately supported nursery schools, which exclude lower class children who cannot afford the costs involved. The probable widespread advent of day-care centers supported by government or by large employers offers a new opportunity for early childhood education for lower class children. The type of education to be provided in these day-care centers is in dispute. Some argue that day care centers should be primarily custodial because, for a given amount of money, more children could be accommodated in custodial centers than in education centers, and thus more mothers would be available for employment. Public schools have had their financial resources strained by lowering their entry level to age five. In contrast, day-care centers emphasize service to children of ages three and four. Early childhood educators view the first two years of life as equally critical to the development of cognitive powers.

Adult Education

The supply of adult education varies enormously from state to state and from city to city. In some rural counties in Wisconsin, Iowa, and Washington, the adult education enrollment exceeds the total population, due to multiple enrollments. In several cities the adult class enrollment is three to four times the full-time school enrollment in all schools combined. However, in most parts of the country adult education has the lowest priority among educational programs. If financial problems occur, adult education is the first program to be closed. Even if it is allowed to continue on a self-sustaining basis, it is typical for enrollments to be less than 1

percent of the adult population. The rise of community colleges provides an opportunity to increase the variety of adult education which can be provided. The actual effect, however, is often for adult educational programs offered by secondary schools to be closed out and for total amount of adult education to remain the same or actually decline. Where high-quality adult education is provided in reasonable quantity, convenient schedule, and modest price, the demand is nearly insatiable. One impetus in this demand is the need to cope with new materials, processes, and methods in jobs; another is the desire for vertical or lateral job mobility.

Compulsory Education

In most parts of the United States students are required to attend school from the age of about 7 to 16. Compulsory attendance laws have remained essentially unchanged for the past 50 years. During this period the actual average age of leaving school has increased more than two years. When increasing the age of compulsory attendance has been proposed, the principal opposition has come from school superintendents. They maintain that keeping unwilling students in school longer would increase discipline problems and that no change in compulsory attendance laws should be made until the schools have an opportunity to develop courses which meet the needs of such students. Similar arguments were advanced 50 years ago when the age of compulsory attendance was increased from 14 to 16.

Over two-thirds of school dropouts are either in or expect to be in the general curriculum. Most school dropouts occur at age 16, but with the exception of programs in agriculture and home economics, almost all vocational education also begins at age 16. This may indicate either that the prospect of being able to enroll in vocational education is not sufficiently attractive to keep students in school or that the student realistically expects that he will not be allowed to join the 25 percent of high school students who can be accommodated in vocational education programs. In any case, because he has dropped out before his vocational education begins, it is highly unlikely that the student will acquire any saleable skills before leaving school.

Despite this lack of saleable skills, many dropouts succeed reasonably well, particularly if they are white males. One reason may be that dropouts occur throughout the school year and the

competition for entry level jobs is lowest during the school year. If schools were to spread the time of graduation throughout the year, this advantage to the dropout would disappear, and the problems facing the unskilled dropout would become even more severe.

Simply increasing the age of compulsory attendance would result in more students being graduated from the general curriculum. This is the curriculum in which they are enrolled at the time of dropping out, and it is the only curriculum in which most of them would be allowed to continue. If increased opportunities were available in vocational curricula or if the general curriculum was made more meaningful, increasing the age of compulsory schooling might be more attractive and feasible. If the school encompassed within its scope alternative external learning experiences, through work experience, travel, etc., returning to the classroom when appropriate, the incidence of the dropout and the need for compulsion might both be relieved. The choices are clear: either provide saleable skills to potential dropouts prior to age 16 or increase the attractiveness and usefulness of continued enrollment.

Graduation Once per Year

Jobs become available at all times of the year, as workers retire, die, or change occupations and as new jobs are created by business expansions and new products. The supply of new full-time workers appears once each year, in late spring, when the school year ends. Along with the graduates comes an even greater supply of students who want jobs only for the summer. If the supply and demand for the year are in balance, then some of the new supply of workers will need to wait almost a year before enough jobs will become available. Because the supply of vacation workers comes all at one time, fewer of them will get jobs than would be the case if school vacations came at different times of the year for different students.

The single graduation each year aids school dropouts, but it hurts employers and graduates. A system which allowed students to leave school for full-time employment or for cooperative work-education programs at any time of the year they were ready would be far superior.

The Demand for Accountability

In complex ways, education in the United States manages to be both a whipping boy and a sacred cow. Its current "bad press" is probably more attributable to its failure to fulfill unrealistic expectations than to its actual weaknesses. Nevertheless, criticism and demand for reform and experiment are at peak intensity. Career education is a key concept in this ferment.

The dramatic postwar expansion in educational enrollments in the United States could have been expected to have eventual repercussions. Most radical social changes tend to follow a pendulum path, eventually swinging back then forward in search of balance. Such is the reaction that causes local voters to reject school bond issues, legislators to cut back on university budgets, and a recent author to entitle his book *Education and Jobs: The Great Training Robbery*.[2]

Education had become a sacred cow constantly demanding more feed from the public manger. School teachers had descended from their lofty professional perches into the market place to strike for and win substantial pay increases. Then students, instead of expressing gratitude, seemed to reject the establishment which provided their support. To some degree it may be traditional anti-intellectualism; to some degree, resentment and jealousy; or to some degree, the emergence of other priorities that appears to be "turning off" the taxpayer and legislator.

Employers are also beginning to feel "had." They accepted the premise that education credentials were evidences of competence. A high school diploma was the minimum employment threshold to many of them. Since high school and college graduates were available, why accept dropouts from either level. Those without education were thus doubly burdened in competition; so those lacking it were well advised to pursue it.

Much of the growing educational demand from employers was real. The most rapidly growing occupations were clerical, technical, and professional, which required intellectual as much as manual training. To some extent, the diploma was a useful

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[2] Ivar Berg, *Education and Jobs: The Great Training Robbery*, (New York: Praegar, 1970).

screening device for a lazy personnel man. It proved the individual had been reasonably regular in attendance and reasonably docile in relation to his supervisors. But to a substantial extent, it was a false standard. For many occupations, the relationship between job content and school course content was minimal. Overtrained employees quit in frustration, and turnover costs were high. Employers were paying for the individual's education costs and his expectations in addition to his performance.

Another major source of dissatisfaction was the failure of education to eliminate in one generation the disadvantages which kept many of the poor and minority from "making it" in the school, on the job, and in society. The schools of rural depressed areas and central city ghettos were notoriously ineffective.

It is useful for perspective to recognize that the dissatisfactions which produced the demand for career education were the same as those undergirding other demanded educational reforms. All involved the demand for accountability. (If we are to entrust to you educators our resources and our kids, we want you to produce and we want some objective measure of whether or not you did!)

Prime examples of this demand for accountability are performance contracting and the proposed voucher-demonstration projects. Though aimed at the same goal, the two are based on divergent philosophies. Performance contracting involves identification of specific, short-run, and measurable goals, contracting out the education task to a profit-seeking contractor and rewarding him by the degree to which the objective is attained. It is a "Father knows best" approach, assuming that the authorities know what learnings are needed, can define them, and can measure their achievement and the contractor can produce them. The voucher approach applies traditional private enterprise—consumer sovereignty to the education market. Give each child and his parents a voucher good for so much education and let public and private schools compete in their attractiveness to the customer. It assumes that the student and his parents know what is best for him, can find it, and will choose it.

The demand for career education should be read in this same context. Employment is a key element in social welfare, and

employment stability and earnings are measurable employment indicators.

In part, education has been blamed for the consequences of postwar fertility. Had there been fewer new entrants to the labor force, employers would have had no choice but to hire them, and youth employment would not have been so high. That does not mean that they would have been well prepared.

Youth, whether dropout or graduate, at secondary or post-secondary levels, has been inadequately prepared to earn a living and to meet the needs of the labor market. The deficiency has not been just job skills. In fact, those are often the easiest to supply through alternate routes such as on-the-job training. It is those attitudes toward work—those human relations skills, the knowledge of alternative career choices and their implications, the ability to manipulate the labor market, etc., which are the essence of career education—that are the major lack.

Career education promises to supply these attributes along with the job skills. It also provides a specific objective and measurable criteria for evaluation. Whereas education has traditionally been evaluated by input (How many pupils per teacher? Were the teachers certified? Were the appropriate pedagogical techniques used?), an output criterion would then be supplied (Did they get jobs? Were they retained and promoted? How much did they earn?). Equally important and harder to measure would be, "Did they find their work fulfilling?"

Career education is but one proposed educational reform. It will require some radical restructuring of philosophy, objectives, and techniques. Chapter 3 provides some examples of how it has been introduced in the classroom, while Chapter 4 is concerned with how to "sell" it to education decision makers.

CHAPTER 3

The Developing Concept of Career Education

It is critical to the implementation of career education to be assured that it is no fad but rather that it is a stage in the development of a concept with the power of long discussion and experimentation behind it. The current intensity of interest in career education can be attributed to the energy and commitment of Sidney P. Marland, Jr., as U.S. Commissioner of Education. However, it would be an underestimate of the power of the concept to attribute it to one man, and it in no way diminishes his contribution to recognize that he is channeling and focusing diverse forces which for many years have been moving in that direction. All of the sources, forces, and directions from which the emerging concepts have been drawn cannot be inventoried here. It is sufficient to supply a few examples of the years of thought, experiment, and experience which undergird the decision to push career education as a high-priority policy. After providing such examples, this chapter offers an illustrative career education model, not as a proposal to be followed but as a clarification of what the concepts might mean in practice.

Precursors of Career Education

The dissatisfaction with a system which ignored career preparation and development except for a limited number of vocational graduate students is deep-seated and long term. Numerous experimental projects have explored and developed concepts and components which are now recognizable as integral parts of career education, though none of them alone ever comprised a comprehensive career education system. Commissions and advisory councils have recommended principles, practices, and legislation with the same impact.

As examples, Ford Foundation funded a number of projects over the past decade which experimented with important elements

of what is now known as career education. The "Technology for Children" project in New Jersey was designed for a systematic kindergarten through grade 12 exposure to the workings of the economy and the nature of technology and some of the occupations connected with it. Like the New Jersey program, the intent of Nova schools in Florida has been to introduce children to a wide range of employment-related experiences through tools, mechanical devices, and games in grades 1 through 6 to expose them to fundamental concepts of technology in grades 7 and 8, and to increase specialization in grades 9 through 12. The objective is to develop confidence, knowledge, and skills within a family of occupations, enhancing the immediate employability to the student yet holding the door open to continued education and training. The American Industries project in Wisconsin differed from the New Jersey and Nova approaches in that it began at the eighth grade rather than in elementary school, but it had similar objectives. The "Pre-engineering Technology Program," also known as the "Richmond Plan" or "Pre-Tech Program," used widely throughout the San Francisco Bay area is an example of efforts to offer a broad academic education but to give it relevance, to increase motivation, and to provide saleable skills by structuring the academic offering around a core of manual or technical occupational skills.

The "zero reject" concept of the San Mateo, California, schools accepted the responsibility for seeing that students were employable whenever they chose to leave school, whether as a dropout from grade 10 or with a doctorate. Occupations were grouped by clusters and by levels which formed ladders of progression throughout the educational experience.

The Industrial Arts Curriculum Project, supported by USOE, and conducted by the Ohio State University and the University of Illinois was another seminal contribution. Its two curriculum packages, "The World of Work" and "The World of Manufacturing" are being widely adopted throughout the country, but perhaps an even greater contribution was made toward the development of a theory of career education and a system of curriculum development and teacher education which allows effective curriculum change to take place.

The state of Maryland has been, for a number of years, supporting a statewide "career development" effort. The Maryland program is especially concerned with work attitudes and the

freedom and appropriateness of career choice. It emphasizes orientation to the world of work, followed by exploratory experiences which aid a child to perceive himself in many work settings, the provision of experiences as well as data for choice making, and the maintenance of options in personal career decisions.

Each of these examples represents perhaps a decade of experience with aspects of what is now called career education. Other such innovative programs could be cited. In fact, when personnel at the Center for Occupational Education at North Carolina State University was assigned by USOE to identify locations and programs that could be described as career education systems, they found 41 operating which are currently being studied and described for dissemination. In these and other instances, concepts of the interrelatedness of career development and personal and social development, of academic and vocational education, of all levels of the educational process, and of the need for adaptability throughout a working life were precursors of present advocacy.

Remedial manpower programs for the disadvantaged were another source of career education thinking. The Manpower Development and Training Act of 1962 (MDTA) recognized the need for retraining adults as technological and economic change threatened their existing means of livelihood and later shifted to providing competitive skills to disadvantaged people. Several components of the Economic Opportunity Act (EOA) were also remedial in nature, designed to provide work attitudes and job skills to those leaving the school system without having acquired them. From the skills centers developed under MDTA and the Job Corps of EOA merged important insights into the needs of underprepared adults and ways of remedying their shortcomings. Examples are: (1) remedial adult basic education; (2) prevocational training to offer those with limited labor market exposure an opportunity to try out a number of skills before choosing one for training; and (3) open entry/open exit practices to remove all entry requirements and the structuring of all training according to a ladder concept, assuring that even if the individual could not complete a full course of training, he could always leave with some saleable skills.

Another precursor of career education was a decade of change in the thinking of many opinion and decision makers in

vocational education. The Vocational Education Act of 1963 incorporated at least one shift in basic philosophy. Traditional vocational education legislation from 1917's Smith-Hughes Act to 1963 had emphasized training to meet the skill needs of the labor market. The 1963 Act turned that around to give priority to the employment needs of various groups within the present and potential labor force.

An Advisory Council on Vocational Education involving both general and vocational educators and a number of noneducators ranged far beyond traditional skills training and clearly presaged career education when its 1967 report advocated "five operational principles for vocational education":

> 1. Vocational education cannot be meaningfully limited to the skills necessary for a particular occupation. It is more appropriately defined as all of those aspects of educational experience which help a person to discover his talents, to relate them to the world of work, to choose an occupation, and to refine his talents and use them successfully in employment. In fact, orientation and assistance in vocational choice may often be more valid determinants of employment success, and therefore more profitable uses of educational funds, than specific skill training.
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> 2. . . .Where complex instructions and sophisticated decisions mark the boundary between the realm of man and the role of the machine, there is no longer room for any dichotomy between intellectual competence and manipulation skills and, therefore, between academic and vocational education.
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> 3. . . .Education cannot shed its responsibilities to the student (and to society in his behalf) just because he has chosen to reject the system or because it has handed him a diploma. In a world where the distance between the experiences of childhood, adolescence, and adulthood and between school and work continually widen, the school must reach forward to assist the student across the gaps just as labor market institutions must reach back to assist in the transition. . .
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> 4. Some type of formal occupational preparation must be a part of every educational experience. . .In addition, given the rapidity of change and the competition from generally rising educational attainment, upgrading and remedial education opportunities are a continual necessity. . .
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> 5. The objective of vocational education should be the development of the individual, not the needs of the labor market. . .The system for occupational preparation should supply a saleable skill at any terminal point chosen by the individual, yet no doors should be closed to future progress and development.[3]

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[3]"Vocational Education: The Bridge between Man and His Work," publication 1, Highlights and Recommendations from the General Report of the Advisory Council on Vocational Education, U.S. Department of Health, Education and Welfare, Office of Education, December 1967 (multilithed); reprinted in Rupert N. Evans, Garth L. Mangum, and Otto Pragan, *Education for Employment: The Background and Potential of the 1968 Vocational Education Amendments*, Policy Papers in Human Resources and Industrial Relations, No. 14 (Institute of Labor and Industrial Relations, University of Michigan and Wayne State University), pp. 63-64.

Based on these principles, it recommended a "unified system of vocational education," some of the key components of which are:

1. Occupational preparation should begin in the elementary schools with a realistic picture of the world of work. Its fundamental purposes should be to familiarize the student with his world and to provide him the intellectual tools and rational habits of thought to play a satisfying role in it.

2. In junior high school, economic orientation and occupational preparation should reach a more sophisticated stage with study by all students of the economic and industrial system by which goods and services are produced and distributed. The objectives should be exposure to the full range of occupational choices which will be available at a later point and full knowledge of the relative advantages and the requirements of each.

3. Occupational preparation should become more specific in the high school, though preparation should not be limited to a specific occupation. Given the uncertainties of a changing economy and the limited experiences upon which vocational choices must be made, instruction should not be overly narrow but should be built around significant families of occupations or industries which promise expanding opportunities. . .All students outside the college preparatory curriculum should acquire an entry-level job skill, but they should also be prepared for post-high school vocational and technical education. Even those in the college preparatory curriculum might profit from the techniques of learning by doing. On the other hand, care should be taken that pursuit of a vocationally oriented curriculum in the high school does not block the upward progress of the competent student who later decides to pursue a college degree.

4. Occupational education should be based on a spiral curriculum which treats concepts at higher and higher levels of complexity as the student moves through the program. Vocational preparation should be used to make general education concrete and understandable; general education should point up the vocational implications of all education. Curriculum materials should be prepared for both general and vocational education to emphasize these relationships.

5. Beyond initial preparation for employment, many, out of choice or necessity, will want to bolster an upward occupational climb with part-time, and sometimes full-time, courses and programs as adults. These should be available as part of the regular public school system. They should not be limited to a few high-demand and low-cost trades, but should provide a range of occupational choice as wide as those available to students preparing for initial entry.

6. Occupational preparation need not and should not be limited to the classroom, to the school shop, or to the laboratory. Many arguments favor training on the job. Expensive equipment need not be duplicated. Familiarization with the environment and discipline of the workplace is an important part of occupational preparation, yet is difficult to simulate in a classroom. Supervisors and other employees can double as instructors. The trainee learns by earning. On the other hand, the employer and his supervisors may be more production than training oriented. The operations and equipment of a particular employer may cover only part of a needed range of skills, necessitating transfer among employers for

adequate training. The ideal is to meld the advantages of institutional and on-the-job training in formal cooperative work-study programs.

7. Effective occupational preparation is impossible if the school feels that its obligation ends when the student graduates. The school, therefore, must work with employers to build a bridge between school and work. Placing the student on a job and following up his successes and failures provides the best possible information to the school on its own strengths and weaknesses.[4]

The 1968 amendments to the Vocational Education Act were based on the council's recommendations and, though they did not give legislative sanction to the concepts, they removed a number of legal obstacles and made their implementation possible.

All over the country, spontaneous developments were leading in the same direction, but centralized national encouragement and advice were needed. When USOE made its commitment to career education, it was able to draw on these concepts and practices. In fact, even before that official commitment, many of the exemplary vocational education projects funded by USOE under the 1968 amendments developed components which were ready for adoption as the career education emphasis began to jell. Using as leverage its vocational education research funds, USOE was able to intensify and give leadership to these local efforts. For instance, USOE's Bureau of Adult, Vocational and Technical Education identified and codified 15 occupational clusters appropriate for career education: agri-business and natural resources, business and office, communications and media, consumer and homemaking education, construction, environment, fine arts and humanities, health occupations, hospitality and recreation, manufacturing, marine science, marketing and distribution, personal services, public service, and transportation.

Following this lead, a number of states and local districts began restructuring their educational programs around the career education theme. for instance, in the summer of 1970, New Jersey appropriated funds to begin experimental career education programs in three cities. Because of the success of the programs, the governor called a meeting of the mayors of 24 cities to review the results of the experimental projects and discuss further spread of the program on a statewide basis.

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[4] *Ibid.*, pp. 64-68.

In the spring of 1971 Arizona's legislature enacted a bill providing $2 million to launch career education in a selected number of Arizona Public schools. Fifteen school districts are converting their programs into a comprehensive kindergarten through the twelfth grade career education system. Much of the material which the Arizona State Department of Education used for launching the effort was derived from experience and documentation which grew out of the vocational exemplary projects sponsored by USOE whose 15 occupational clusters are playing a key role in this conversion program.

During the summer of 1971, with the help of a USOE grant, the state of Delaware began a one-year planning effort for statewide conversion to a K-12 career education program. In Mississippi, Jones County schools are serving as the focal point for a model career education program in that state. School personnel from neighboring counties are sent to observe the Jones County model and adopt its techniques.

North Dakota is using the Bismarck Public School District as the demonstration site for a K-14 career education program. The Bismarck program features broad occupational orientation at the elementary and secondary levels to increase the students' awareness of options open to them in the world of work. There is a concentration on cooperative work experience and intensive occupational guidance and counseling during the last years of school. The program assists in initial placement of all students in either a job or in post-secondary education.

Georgia and Wyoming are following the same pattern, each developing a K-12 career education system in one local school district with the aid of federal funds and then spreading the model to other districts within their states.

The Dallas (Texas) Independent School District has spent more than $21 million in the construction of facilities, procurement of equipment, and development of curriculum for its massive career education effort. In May 1971 the San Diego School Board in California passed a resolution promulgating the development of a comprehensive K-12 career education program.

Others are considering the logical addition of early childhood education and the full range of post-secondary education to the career education framework.

In the summer of 1971, with the help of outside consultants, USOE selected six sites from many nominees for the development of large-scale demonstration models of career education in public school systems. Two million dollars in USOE funds are being spent to help the six in their developmental effort which must become operative when schools open in September 1972. The six sites are Atlanta, Georgia; Hackensack, New Jersey; Pontiac, Michigan; Jefferson County, Colorado; Mesa, Arizona; and Los Angeles, California.

In the meantime, 52 "mini-models" of career education, funded as "exemplary programs" under the Vocational Education Act, have been activated in local school districts in each of the 50 states, in Puerto Rico, and in the District of Columbia. In addition, Commissioner Marland in September 1971 announced he was turning over to the states $9 million from his discretionary funds for vocational research and development projects focused on establishing comprehensive career education models. Most of these responses, occurring within one year after USOE's formal announcement of the career education emphasis, emerged from locations already trending along the career education road. The response and the speed with which others are "getting on this bandwagon" are further support for the view that the idea is one whose time has come. It is doubtful that any project yet incorporates all of the concepts and components, and merits designation as a "career education system." The objective of this recital has been to dispel any lingering suspicions that the emphasis is just another temporary fad.

Career Education in Practice

So far, this handbook has responded to the questions, "What is career education?" and "Why is it needed?" and has briefly explored the background of the concepts. Nothing so far has answered the most difficult question of all: "What does the teacher do in the classroom and in relation with the community to move from the conceptual level to practical classroom applications?" Answering that question is not the primary purpose of this handbook. It is directed to education policy makers and community opinionmakers, and the implementation it pursues is frankly strategic and political. Other treatises must be addressed to the classroom teacher. Curriculum materials must be prepared and individual teachers must adapt the materials of others and develop

their own to bring career education to classroom reality. To do so is vital but will not occur in substantial measure until the broader policy decisions are made.

To give further clarification to the concepts and components of career education, the remainder of this chapter reviews the Chapter 1 components of career education and illustrates them with one state education system's approach to classroom implementation.

Reiteration of the Career Education Components

As the five components of career education were described in Chapter 1, the perceptive reader will have noted that three of the components refer to institutional involvement: the home and family, the school, and the employing community. The other two components—vocational skill development and career development—are seen as learning processes which are not confined to any one setting or time segment but which: (1) are begun in the home, (2) are developed and maintained in the school, and (3) are exercised and tested in the community. As lifetime processes, they give credence to career education in practice, with the evidence that together the three institutions can ensure that every individual leaves school with a saleable skill and that every individual has access to both the knowledge and the tools needed to make wise career decisions.

The components in the chronological order of individual experience as they are listed in Chapter 1 are repeated here:

1. The role of home and family in setting basic attitudes toward work
2. The obligation of all teachers in all courses to identify the career implications of their subject matter
3. A comprehensive career development program to help students understand themselves and the educational and occupational alternatives available and to choose wisely among them
4. Vocational skill training for specific occupational competence
5. Involvement of employers and labor organizations in providing advice, observation, and practical work experience

There are three essential steps in the career education process. The first is the *awareness* step. Its objective is to help all individuals become familiar with the values of a work-oriented society. It exposes individuals to a variety of work values so that they will know and understand those that exist. It does not seek to impose any particular set of work values on any individual. Rather, it simply assumes that a person cannot develop his own work values unless he is familiar with those held by others and understands their basic effects upon individuals and upon society.

The second step involves *exploration and personal decision making*. Its objective is to help individuals integrate work values into their personal value systems. In this step, the individual thinks about both himself and about work values, decides the meanings various work values have for him, accepts those work values that are congenial to his total personal value system, and rejects those that are not. Included are all those activities and procedures designed to help individuals explore the personal meaning various forms of work values hold for them.

The third step seeks to help individuals *implement* work values in their lives. This is essentially an occupational preparation, job placement, and job success step. It consists of all those activities and procedures required for an individual to become proficient in vocational skills and to enter into employment.

This three-step process is a continuing one which most individuals will experience more than once in their lives. Indeed, it must occur whenever the individual is faced with choosing or changing his occupation. It is tied as intimately to why an individual chooses to work as it is to why he chooses one form of work over another. It is not a process that can be assigned to any one part of the educational establishment but rather must involve all educators at all levels in all kinds of educational settings. Similarly, it is not a process that education, as part of the total society, can accomplish by itself. Rather, it will demand the active involvement of the total community of which the school system is a part. Thus, as each of the five components is considered, it is well to keep clearly in mind that career education represents a concept considered appropriate for all students at all educational levels and in almost all kinds of educational settings.

A Conceptual Model

There is as yet no accepted pattern or format for career education, and it may be preferable that no single orthodoxy emerge around this new education thrust. Every labor market is different. Each community has its own economic structure, unique population, and developed values. Freshness and enthusiasm are more likely to survive if experiment and innovation continue. Pre-service and in-service training, illustrative materials, and technical assistance will be necessary but must not impose conformity.

To give further clarification to the concepts and components of career education, the remainder of this chapter derives a model from emerging practices in selected public schools in Maryland.

One of the virtues of the examples is that they were never derived as a model but emerged from the practices of a variety of schools all having in common only the encouragement and counsel of staff members of the Maryland Department of Education. The intent of this model is not to suggest replication but only to provide illustration of the directions a practical implementation of abstract concepts can take.

The matrix in Figure 2 may be useful to illustrate the interrelationships among the five components and to provide a framework for describing how concepts of career education can be activated in both a given setting and at a given age. The series of circles top and bottom represents those components which are sequential processes; the left hand verbal listing denotes the influence of the various institutional components. Each cell in the matrix states a human occurrence which, when acted upon by the institutions and processes affecting it, can result in a measurable accomplishment.

The *career development process* represented by the bottom-most series of circles, is not exclusive to any one agency or maturational level. It therefore is represented in the matrix as a sequence of desirable transitional behaviors that each individual will be able to demonstrate as each institution contributes to his maximum personal and affective growth. The end product of the process should be the individual's internalization of his own worth as a productive member of society. By the same token, the

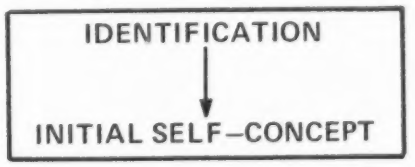
vocational skill development process at the top of the diagram begins with the early appearance of a basic psychomotor harmony upon which the individual builds foundations for employability and continues through his attainment of proficiency and excellence in a chosen vocation as culmination of the training and experience provided through the combined efforts of the three institutions and skills development counterpart: career development.

In reading down each trio of cells under "children," "youth," and "adults," one can follow an individual through a lifetime. In reading across, one can see how each institution and process serves, in a particular and complementary way, to affect that individual.

The final column, to the far right of the matrix, illustrates both the continuing outcomes of each component, and if read downward, expresses career education's goal for every individual.

It is now possible to introduce a few illustrations of ways in which a school might offer elements of career education. Nine examples from Maryland schools follow, corresponding to the nine cells in the matrix. They are offered as illustrations with the expectation that every community can improve upon them.[5]

Children, Column I-a



A child's initial self-concept is typically the one evolving from the importance that other family members place upon both his uniqueness from and contribution to themselves as individuals as well as integral parts of a functioning unit. To permit the child to express these self-estimates, the following activities might be utilized:

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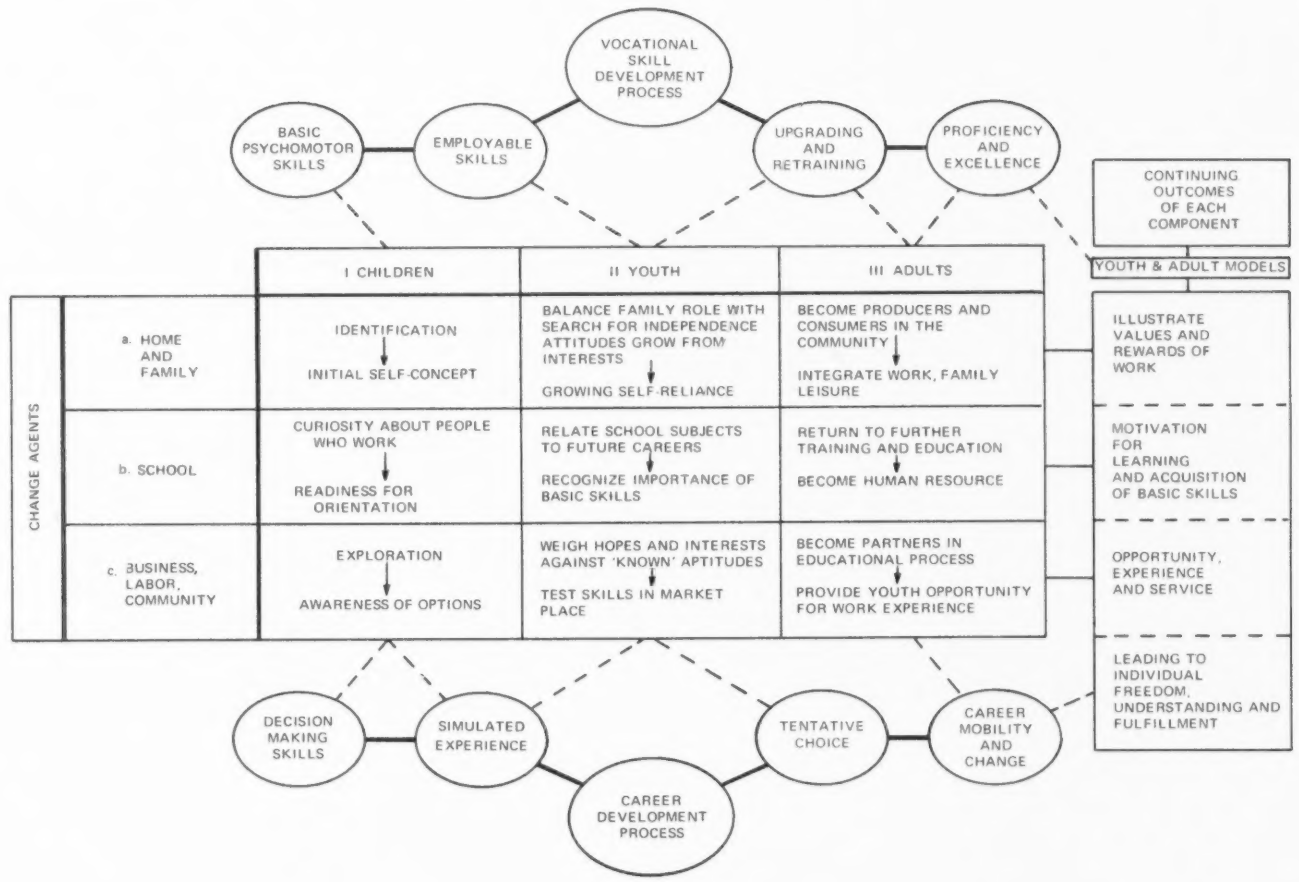
[5]See end of chapter for references *a* through *k*.

FIGURE 2
Career Education Matrix


VOCATIONAL SKILL DEVELOPMENT PROCESS
BASIC PSYCHOMOTOR SKILLS
EMPLOYABLE SKILLS
UPGRADING AND RETRAINING
PROFICIENCY AND EXCELLENCE
CONTINUING OUTCOMES OF EACH COMPONENT
I CHILDREN
II YOUTH
III ADULTS
YOUTH & ADULT MODELS
CHANGE AGENTS
a. HOME AND FAMILY
b. SCHOOL
c. BUSINESS, LABOR, COMMUNITY
IDENTIFICATION → INITIAL SELF-CONCEPT
CURIOSITY ABOUT PEOPLE WHO WORK → READINESS FOR ORIENTATION
EXPLORATION → AWARENESS OF OPTIONS
BALANCE FAMILY ROLE WITH SEARCH FOR INDEPENDENCE ATTITUDES GROW FROM INTERESTS → GROWING SELF-RELIANCE
RELATE SCHOOL SUBJECTS TO FUTURE CAREERS → RECOGNIZE IMPORTANCE OF BASIC SKILLS
WEIGH HOPES AND INTERESTS AGAINST 'KNOWN' APTITUDES → TEST SKILLS IN MARKET PLACE
BECOME PRODUCERS AND CONSUMERS IN THE COMMUNITY → INTEGRATE WORK, FAMILY LEISURE
RETURN TO FURTHER TRAINING AND EDUCATION → BECOME HUMAN RESOURCE
BECOME PARTNERS IN EDUCATIONAL PROCESS → PROVIDE YOUTH OPPORTUNITY FOR WORK EXPERIENCE
ILLUSTRATE VALUES AND REWARDS OF WORK
MOTIVATION FOR LEARNING AND ACQUISITION OF BASIC SKILLS
OPPORTUNITY, EXPERIENCE AND SERVICE
LEADING TO INDIVIDUAL FREEDOM, UNDERSTANDING AND FULFILLMENT
DECISION MAKING SKILLS
SIMULATED EXPERIENCE
TENTATIVE CHOICE
CAREER MOBILITY AND CHANGE
CAREER DEVELOPMENT PROCESS

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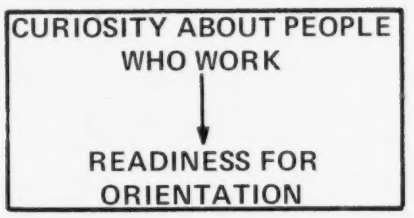
1. Child draws each member of his family on large piece of paper. He then draws himself as he is *now*, and how he thinks he will look in the future. He could then place his current estimate next to the family member he is most like now and discuss his reasons for this with the class. All children could draw their *future* selves and let the teacher arrange a hall bulletin board with the unidentified drawings. From this point the topic of the necessity for all kinds of workers would naturally follow, using a contest with members of another class. It would be their task to name the activity each child seems to represent, report their findings underneath each picture, and discuss with the first class the duplications and "omissions" they could see. The teacher could follow this with a discussion of the family's versatility and interdependence in working roles that children have not recognized, e.g.:

   Father is (sometimes) a plumber.
   Father is (sometimes) a judge.
   Mother is (sometimes) a chauffeur.
   Mother is (sometimes) a seamstress.
   Brother is (sometimes) a carpenter.
   Brother is (sometimes) a landscaper.
   Sister is (sometimes) a decorator.
   Sister is (sometimes) a chef.
   Child is (sometimes) a sportscaster.
   Child is (sometimes) a graphic artist.[a]

2. A linking activity would be to have each child perform self-sorts with numbered papers (1, 2, 3) on the desk in front of him. The teacher would use transparencies of stick figures engaged in some kind of activity. The child would decide if that central figure (star on chest) was "sometimes like me" (1), "always like me" (2), or "never like me" (3) and place the appropriately numbered paper down on his desk at the teacher's signal. Scoring will yield a measure of self-concept which can be combined with a teacher-administered sociogram, e.g., the Sungram. (Results of these measures can be applied in more effective classroom family organization and individual guidance where necessary.)[b]

Children, Column I-b



As children move through the primary grades, their curiosity about all people who work has begun to extend beyond the confines of both the home and the immediate classroom. They have not yet ascribed status, or lack of it, to any human being performing a task. This natural curiosity and acceptance are transformed into genuine interest and awareness through such activities as the following:

1. Child accompanies for a day, interviews, and invites to the classroom a member of the school staff. He introduces him or her by the work he does, why it is important, and why that person is unique in his eyes. Visitor then talks about his job and his contribution to the school.

2. Who are the people who come to our house with their goods and services? Who are the people we have to get into a bus or car to reach? Here the teacher could use these listings made by the children to initiate a discussion of mobile versus stationary workers, indoor versus outdoor workers. . .as well as the producers of goods versus services.

3. Learning interview techniques and preparing bulletin board displays of discoveries made within the school and classroom could precede the child's venture into finding out for himself whether his "guesses" have been accurate ones.

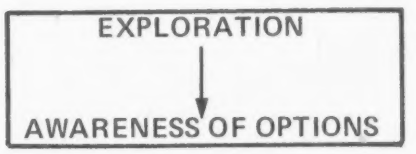
   a. Interview parents about their work. What are the reasons for working? What does school have to do with work? How do I "practice" to be a good worker? Report to class. Class selects five visitors the children would like to have.[c]

   b. How does it "feel" to be a _____?

Manipulate activities designed to allow child concrete experience. Textiles, clay, wood, plastic are used in the enactment of stories, poetry, storekeeping, etc. This could be accompanied by gross motor activity which investigates coordination, dexterity, aptitude for heights, etc. (music, dance, physical education).[d]

c. Ascribing value to quality and time. Children learn economics of personal expenditures when they save, spend, designate, or choose activities motivated by completion of a task, e.g., hierarchies of work and play form when "rewards" issue from the quality of each. Example: completed assignment yields time to observe the television repairman working in the back of the classroom every Tuesday. The repairman, in turn, discusses the skills of human relationships, communication and computation he must have.[e]

Children, Column I-c



The community can be a laboratory for exploration where youngsters of elementary and middle school age observe, question, and begin to match themselves with a broad range of working adults.

1. Take children to the town's bakery. Blindfold them. Have them describe the sounds and fragrances. Let them estimate what is being done. Remove children's blindfolds. Follow the "product" to the delivery trucks. Have bus follow truck driver on his rounds. Delay sampling products until back in school cafeteria. Discuss baking process with school cafeteria workers.

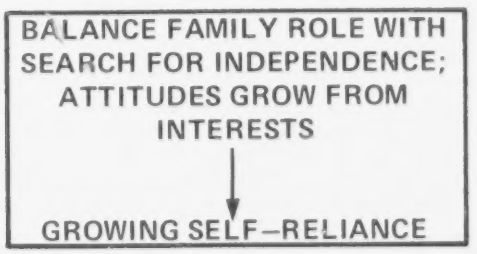
2. Follow up with visitors. Have children make cookies or pudding and invite goods-producing businessmen. Guests could introduce themselves by "I make ," or "I build ." Another trip is scheduled on the spot, with each businessman committing himself to assist the

teachers with preplanning and follow-through back at the school. This would include his introducing skills of employability already familiar to each child, e.g., "My employees must be on time" rather than "He must be able to type 60 words a minute."

3. Investigate service careers through visits from or to government agencies, military installations, civic organization, hospitals. Begin to differentiate between personal and social services. Children can maintain newspapers and bulletin boards which illustrate the people who choose careers in the two major areas of goods and services. These are particularly effective if recognizable members of the family and community are pictured.

4. Children apply for school and classroom jobs. Have them fill out resumes and let them be interviewed by sixth graders; they may work in the earned position for three months only. They then train their replacements who eagerly wait behind them in line. Examples: audiovisual technicians, environmental control, landscaping and grounds, maitre d's and hostesses (cafeteria), stock clerks, supply clerks, nurse's assistant, postal service, etc.[f]

Youth, Column II-a



In early adolescence the search for independence is marked by a weighting of peer, family, and self values. Attitudes about work's relationship to individual fullfillment are developed positively when the school and the home jointly provide experiences in decision making, work simulation, and the personally or profitably rewarding use of leisure time. The following examples are cited:

1. Classroom discussion of how physical differences as well as personality differences are often determinants of career patterns. Have students construct career lines on families and close relatives, noting decision points, physical attributes related to their work, reasons for changes in careers, etc. Follow up with self-diagnosis in psychomotor skills.[g]

2. Connect hobbies and recreational interests with potential careers. Have students interested in photography, science, journalism, graphic arts, etc., pool skills in the construction of audiovisual shows of people at work. Work with local radio and television station personnel as consultants and for possible dissemination of finished product.[h]

3. Home-based entrepreneurs (baby-sitters, paper boys, lifeguards, candy-stripers at hospitals, playground assistants, team managers, as well as craftsmen in ceramics, leather, etc.) discuss personal rewards and possible career applications of these experiences. Students assess family acceptance and support of these activities as well as their own responsibilities and "returns" to family harmony and financial equity.

4. Students role-play membership in a company by rotating positions in management, middle management, and labor. Whether a product or a service is the outcome, emphasis is upon testing student capacity for and interest in working effectively alone or with others. The home can be both the recipient and the consultant to the learning experience in such projects.[i]

Youth, Column II-b

RELATE SCHOOL SUBJECTS TO FUTURE CAREERS

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RECOGNIZE IMPORTANCE OF BASIC SKILLS

Young people should and will challenge the relationship of school subjects to the work they might do. Natural connections

between basic skills and effective, satisfying work performance can be identified in all subject areas.[j]

English	*Careers*
Write a paragraph describing your present home or apartment as if you were trying to sell it.	Real estate agent, secretary, advertising copywriter, machine operator, typesetter, etc.
Mathematics	
Will the number of children you have make a difference? Draw a family tree with you and your future spouse at the head. Compare the family clan size of a one-, two-, three-, and four-child family after five generations. Then comment on your personal role in population control.	Demographer, ecologist, designer, sanitary engineer, statistician, etc.
Science	
Using various grafting techniques, investigate the reaction and growth capabilities of tree grafts.	Tree surgeon, forest ranger, fruit farmer, etc.
Make a chart showing how various colors affect people's behavior.	Decorator, painter, advertising agent, psychologist, etc.
Social Studies	
Describe the effects of geographical terrain upon the formation of population centers.	Factory worker, farmer, fisherman, gradesman, meteorologist, construction worker, etc.
Set up mock trial using hypothetical situation involving two new student	Judge, shorthand reporter, recorder, clerk, librarian, policeman, insurance agent,

drivers. Students role-play all participants and witnesses.	lawyer, telephone lineman, etc.
Home Economics	
Collect samples of wood finishes for furniture and woodwork.	Cabinet maker, refinisher, etc.
Plant a garden, keep an account of expenses and yield, identify consumers.	Grocer, produce clerk, caterer, florist, landscaper, etc.
Industrial Arts	
Have a debate on the pros and cons of mass production.	R & D analyst, consumer research specialist, etc.
Visit a supermarket, choose three items, then paint and write an advertisement for each.	Commercial artist, radio announcer, supermarket manager, packaging specialist, etc.
Art	
Hold class debate on art as a tool for consumer stimulation versus art as an esthetic entity. Have teams create or borrow "examples" and follow up with school survey. Photograph and publish procedure and "results."	Fabric designer, kiln operator, factory worker in art supplies, statistician, photographer, reporter, market analyst, moderator-announcer, etc.
Music	
Study ratios in vibrations of scale tones in chords.	Arranger, performer, music store operator, band director, choreographer, teacher, stage manager, set designer, musician, physical therapist, speech therapist, etc.
Investigate the part that music and dance can play in helping mental patients and those with speech defects. Observe, if	

possible, and role-play. Would these be helpful to the deaf and blind as well?

Health and Physical Education

Interview ten neighbors and convince them to separate their trash and take appropriate items to a recycling center.

Sanitary engineer, truck driver, PR expert, bottling plant workers, local government workers, etc.

Invite members of major or minor league ball clubs or school varsity squad to discuss with candor what effects drugs, tobacco, and alcohol could have on their maximum performance. Medical and psychiatric personnel could serve as reference checks.

Pharmacist, public health nurse, coach, recreation director, dietitian, outreach worker, community ombudsman, etc.

When identified hopes and interests are translated into curriculum decisions, the adolescent should be able to move freely into a vocational skill development experience within the school setting. Whatever his tentative career goals might be, the opportunity to apply his learning capacity must exist. The following examples illustrate the options he might pursue, if he chose to do so:

1. Work-oriented (cooperative) programs for junior high school youth. Here the student is placed in a small business near the school for a few hours each afternoon. His advocates are the school counselor, the program coordinator, teaching teams who are conversant with applications of basic education to employability skills, and the employer's motivating support.[k]

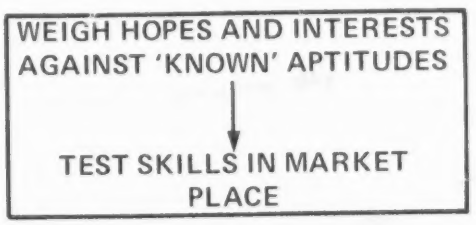
2. Vocational offerings in business, trades and industry, data processing, electronics, cosmetology and barbering, small appliance and engine repair, automotives, practical nursing, food services, etc. Each student will first approximate the skills needed in his high-interest areas

through work-simulation stations developed by teachers. He will then select three areas in which he feels most comfortable and successful and rotate between them by four-week intervals in introductory units.

At the end of this orientation, a tentative selection is made and pursued for the second semester. During this semester the student might spend two periods a day in his home school, one or two afternoons a week at a separate vocational facility plus one hour a day in skill training in his home school. A senior vocational student, a vocational instructor, and the vocational guidance counselor work together with him during this period to assure the balance, comfort, and effectiveness of his total educational and personal program.

The student then proceeds to elect (or not to elect) an area in which he would like to be involved for the remainder of his school term. At the same time post-high school opportunities for further training and/or education are explored in nearby junior or community colleges, along with constant reminders that the student can change his mind at any time without prejudice.

Youth, Column II-c



Although aptitudes are not fully "known" at transition from training to work, the youth who have combined concrete experience with basic psychomotor skills are ready to assess their value to a potential employer. This assessment must consider the objective, third-party evaluation of cognitive and physical capacity in combination with the personal motives and self-estimates of each student.

1. Student maintains a folder containing up-to-date resume, photocopies of work permits, birth certificates, social

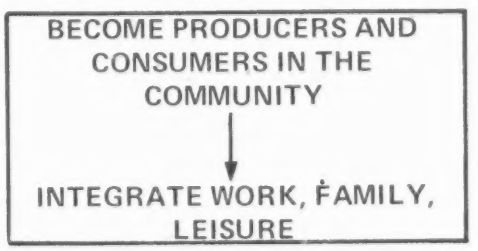
security card, and other essential legal data. This folder is continually reviewed by student, counselor, and current employer.

2. Pencil and paper inventories, self-reports, biographical sketches, and other idiographic data are gathered, with the youth's assistance, by the school's guidance and placement personnel. These are computed as a "profile" which the student may compare with achievement ratings in both academic and vocational areas. Correlations are discussed and studied by youth and helping adults. The youth then diagnoses the evidence and derives his own prescription for remediation, or follow through.

3. Task performance ratings are secured through direct observation by: (1) other students, (2) teacher of that particular vocational skill, and (3) subject himself. Work samples are taken in actual job situation where task performance can be evaluated in "natural" setting.

4. Final and best evaluation is conducted by the employer observing both the specific skills, the work demands, and the capacity his employee demonstrates in working comfortably with others. By working closely with the schools, colleges, and skill-training centers, the employer contributes his specific knowledge in consumer relationships, technological currency, and most important, personal motivation. This motivation, whether it takes altruistic or financial form, becomes the basis for the youth's future designation of and commitment to a career area.

Adults, Column III-a



As the young adult moves into economic autonomy and identification with a career, he finds that he has become both a

producer and a consumer of the goods and services he has learned to value. In creating a family unit of his own, he discovers that still another skill must be acquired, that of integrating his chosen work with family and community responsibilities while maintaining his options for recreation and personal growth. His energy and versatility can be employed in career education by direct contact through:

1. Membership in civic organizations dedicated to the assistance of youth and aged

2. Teaching, tutoring, avocations or "second careers," which are recreationally oriented for the adult and developmentally or emotionally beneficial to the child and to the older adult

3. Commitment to voluntary service within religious institutions, youth groups, political action groups, outreach services, fire and rescue volunteer, etc.

4. Involvement in study groups with other young adults; engaging topics of family planning, budgeting skills, career concerns, employer-employee relationships, etc.

As a new parent, the young adult appears to detach himself momentarily from his peers, while in fact he is recognizing his widening responsibility and influence. Work assumes a new dimension. It becomes more than a vehicle for self-expression and financial reward; it is now a value from which he draws strength and purpose. Decisions are being made during this period. The young parent might well follow the sequence below:

1. Begins long-range planning for home ownership, household purchases, education, and training.

2. Considers alternatives of work location, relating them to personal health, means of transportation, family comfort, proximity to schools, and other helping agencies and institutions.

3. Consults with experts in present career area as to opportunities for advancement and mobility.

4. Decides to upgrade skills in present career, or seeks counseling and information about opportunities in another field.

Adults, Column III-b

Optimally, the decision to return to further training and/or education has been made on the basis of valid information, personal commitment to a chosen career, and the identified needs and desires of the adult individual and his family. Typically, the children of this family are now in school, permitting either or both parents to move toward realization of their occupational goals. The examples which follow illustrate how this purposeful activity yields benefits to the individual and to the institution which he designates as fulfilling that purpose.

1. Selection of the facility or program which best provides the upgrading or retraining opportunity is made through any or all of these means:

   a. Community counseling services
   b. Adult education programs
   c. Private training schools
   d. Extension courses offered by state universities and colleges
   e. Local vocational-technical facilities or centers
   f. Local community colleges
   g. Apprenticeship and industrial training programs
   h. Manpower and skill training programs
   i. Employment services

2. While the individual is either upgrading, retraining, or refining his skills in the work setting, he is also discovering his usefulness in an advisory capacity. The schools which his children attend are now deeply involved in the exploratory process to which he can attribute much of his

own present resourcefulness and optimism. In returning to education as an "expert" in his career area, he serves to motivate youngsters to learn by his own illustration of proficiency, dedication, and reward. The young people, in turn, exact a resurgence of purpose in him. He begins to:

a. Acquire skill in verbalizing the meaning of his work

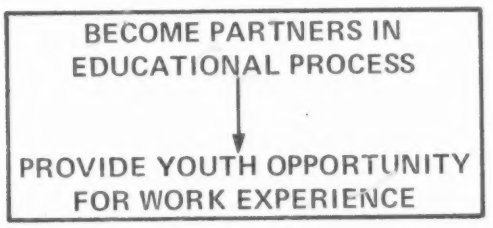
b. Reexamine his own performance on the job

c. Enlist the enthusiasm and concern of his fellow workers and his employer in the education of all children

d. Provide a regular and consistent outlook service to the schools he visits; e.g., new and emerging careers of which he has knowledge, broad opportunities, and specific requirements in his own field; technological advances which may have reduced or eliminated the requirement for certain mechanical skills.

e. Test his efficiency in communicating his knowledge and beliefs by attending the interests and concerns of his own children.

Adults, Column III-c



As vocational maturity is achieved, the adult who has "arrived" may still be seeking fulfillment which extends beyond formal work involvement. Up to this point he has been active as a human resource to the schools, yet he realizes that their capacity to create real work situations is necessarily limited. He now has the opportunity to exert a positive influence as a partner in the education process and proceeds to respond to this relationship in the following ways:

1. Assumes an active role on career education task forces and curriculum committees.

2. Makes the adjustments necessary in his own work to permit young children to observe and interview workers.

3. Establishes work-sample stations appropriate for middle-school, junior high school exploratory experiences.

4. Provides part-time work opportunities for handicapped or disadvantaged individuals of all ages through careful modification of equipment, requirements and job environments.

5. Works closely with school personnel involved with distributive education programs, work-study programs, and exemplary programs for high-risk or dropout-prone youth who are of the minimum age to work. Becomes an integral part of the placement and counseling process.

6. Joins with federal and state agencies to work toward legislation for academic accreditation for valid school *plus* work programs.

7. Develops an exchange program with higher education institutions which permit students and workers to spend time in each other's environments.

8. Works with educators and legislators to strengthen pre-service and in-service programs for teachers and counselors. Such strengthening is illustrated by the inclusion of industrial or business experiences for the educator and basic guidance and human relationships study for the worker involved in upgrading and retraining programs.

After departure from the formal work setting, the retired adult often elects to pursue a new career. His contribution to youth can take the form which only the resources of time and experience can provide in combination. Whether he is sharing his past or joining young people in planning for still another work role, the authenticity he represents is his greatest asset.

Brief though this treatment has been, hopefully the reader now has a reasonably clear idea of the meaning of career education

and notions of his own of how it might be applied in the educating process. These examples are more illustrative than exemplary, indicating the responses of individual schools as encouraged by a state education department staff. Any school or school system which tries should equal or better this model. However, education is a pluralistic social funcation dependent upon a wide array of decision makers, enough of whom will have to be exposed to and converted to the career education approach before it can become reality. Even after that conversion is achieved, each community must design a career education system to meet its particular needs. Chapter 4 is a community plan for that proselyting and design task.

References to Examples

[a]Hickory Elementary School, Bel Air, Maryland. Write Sueann West, Counselor.

[b]"Pictorial Self Concept," Dr. Angelo Bolea, College of Education, University of Maryland, College Park, Maryland 20740.

Sungram, sociogram, and scoring: Nancy M. Pinson, Maryland State Department of Education, 600 Wyndhurst Ave., Baltimore, Maryland.

[c]Career Resource Specialist, Project Elementary Schools, Maryland Career Development Project, Maryland State Department of Education. Write Audrey Allen, 2418 St. Paul Street, Baltimore, Maryland.

[d]Elementary Career Exploration through Industrial Arts. Write Ann Buckley, Longfields Elementary School, Forestville, Maryland.

[e]Hickory Elementary School, *op. cit.*

[f]Hickory Elementary School, *op. cit.*

[g]Thomas Johnson Junior-Senior High School, Frederick, Maryland. Write attention: Career Exploration Workshop Team, Henry Groff: Counselor.

[h]Cabin John Junior High School, Rockville, Maryland. A Career Exploration Workshop. team. (A component of the Maryland Career Development Project, Maryland State Department of Education, 1971). Write Barbara Hinze, Counselor.

[i]Activity engaged by 1971 Career Exploration Workshop teams at workshop site. Maryland Career Development Project, Maryland State Department of Education, 600 Wynhurst Avenue, Baltimore, Maryland.

[j]Product excerpt of nine Career Exploration Workshop teams at workshop site, Maryland Career Development Project, Maryland State Department of Education, 1971.

[k]The work-oriented (cooperative) component of the Maryland Career Development Project, Maryland State Department of Education. Contact John Berrent, Coordinator, General Henry Lee Junior High School, 525 Hanover Street, Baltimore, and Jon Woolford, Rock Glen Junior High School, 201 North Bend Rd., Baltimore, Maryland.

CHAPTER 4

Implementing Career Education

No matter how attractive as a concept, career education can emerge only from concrete efforts at implementation which must occur at two levels; (1) the policy level at which legislators, school boards, and administrators, perhaps influenced by public opinion, opt for a career education emphasis, and (2) the instructional level at which teachers and counselors must develop or be provided with instructional activities. The danger for career education is that too many may endorse its concepts while waiting for someone else to push for implementation. It has been said that "what is everybody's responsibility is nobody's responsibility." Any of the actors in the system could actively promote the required reforms, but no one has the clear assignment. Specific responsibilities should be fixed, and the many participants and advocates should know who is to do what. This chapter addresses itself to specific procedures by which interested parties can set the career education process in motion.

USOE can provide leadership and impetus for career education, but it is at the state and local levels that education is planned, teachers are trained, curriculum is developed, and students are taught. Washington can call for a national response, but it cannot prescribe in detail how the local school system must respond. There is a rich mixture of creative energy in communities across the nation, just as there are unique resources in every region. While state and local school systems may look to Washington for national leadership, it would be contrary to the traditions of American education for the Federal government to do more than call attention to the national need, propose a logical response, cite examples, and perhaps suggest alternative models for local schools to consider in developing their own versions. The planning and implementation must occur at the school and community level, though they look to state and Federal agencies for information, resources, and technical assistance.

This chapter explores the implementation role of state and local education officials and influential opinion-makers and suggests a framework within which local communities may create their own version of career education.

The State Board and the State Department of Education

Though planning and organizing career education must occur at the community level, little is likely to happen without commitment and aggressive leadership from the state board of education in declaring policy and the state education agency (SEA) in carrying it out. The SEA staff will know the strengths and weaknesses of the various local education agencies and know which are most likely to respond innovatively. The SEA allocates both Federal and state categorical funds to local school districts and post-high school institutions. This leadership and fund-allocation role clearly places the SEA in a crucial role in career education advocacy.

State agency responsibilities will include policy making, technical assistance, coordination, professional personnel development, and resource management. It is not unlikely that some career education concepts and practices will be inconsistent with existing state law and procedures. A number of states have very specific regulations covering such items as hours of attendance, off-campus field trips, and specialized course offerings. Other states by law, custom, or regulation may limit the integration of vocational and academic programs or restrict particular learning experiences to prescribed on-campus physical facilities. Where this is the case, the rationale for these laws, regulations, or traditions, should be examined and change should be sought where the laws interfere with progress.

Since career education represents an almost universal educational need, most state educational agencies will probably wish to actively support this program. Each SEA should consider the development of curriculum materials, manuals, and some basic guidelines to assist local school systems in their planning and organizing of career education programs. These materials should be addressed to administrative needs, including the use of professional and noncertificated personnel, financing, procedures for accrediting innovative learning experiences (particularly off-campus activities), the use of school facilities by the

community, and any other administrative topic of significance in guiding local school districts to implement career education.

"Selling" career education is also in large part a state agency responsibility. State board of education members and chief state school officers have widespread political contacts and community influence. Local educators also look to chief state school officers and state education supervisors for direction. These state leaders have a unique opportunity to assist local school systems to introduce innovation and modernization.

Technical assistance will be required in understanding career education, relating it to current practice, and devising specific curriculum plans which adapt the concepts to the local setting. To provide such technical assistance, state personnel must become career education experts by participating in national regional meetings and keeping up with publications, curriculum guides, technological developments, and the whole flow of ideas, material, and apparatus currently prevalent, and by identifying and adapting the best practice in and out of the state for statewide dissemination. Three way communication among state and local educators and between educators and the larger community is both a technical assistance and coordination function because it is from such exchanges that most ideas will emerge. Evaluation is also a form of technical assistance. It is typically a state responsibility; it provides quality control and identifies strengths and weaknesses for replication or improvement.

The leadership and coordination function at the state level is composed of six principal activities:

1. Advocating and generating interest and building motivation to move the entire state school system.

2. Setting priorities in allocating federal and state funds and in reorganizing local education agencies for effort in career education.

3. Developing curriculum and career education instructional materials.

4. Collecting information and disseminating it among all participating school systems.

5. Facilitating cooperation in program planning, promotion, and resource sharing among local school systems.

6. Coordinating local school programs with programs in other states and special national projects.

The state educational agency must play a central role as the facilitator of the career education system to assure the smooth flow of information, ideas, and data concerning career education developments as it originates either in Washington, at the state level, or in school systems.

Career education calls for both conceptual changes throughout and additional steps within education. It requires a major reorientation among existing professional educational staff at every level and in every program component. To win the genuine support of school faculties, administrators, and other educational personnel, a carefully conceived and methodical program of in-service and pre-service training must be designed and initiated by state agencies in cooperation with teacher training institutions and other organizations concerned with professional personnel development. The SEA is in a strategic position to influence training requirements since it establishes teacher certification and is also responsible for establishing requirements for renewing teaching certificates. Concentration on adequate career education training can emerge from this certification function. Teachers who have grown accustomed tc the traditions of subject specialization, a four-walled classroom environment, and learning experiences divided into uniform blocks of time will be able to accept the new look in career education if they are provided with opportunities to study the rationale and promise of career education as a new central focus for our schools.

How teachers learn to work with community resources and how interested citizens are used in a way that complements and supports the professional educator represent a new process in American Education. These valuable observations should be recorded and studied, and those judged appropriate should be classified and disseminated. In this way, creative and imaginative practices will emerge and be made available to all parties interested in the success of career education.

The traditional structure and conventional procedures found throughout most schools are usually reflected and often

perpetuated at the college and university levels. Teacher training institutions are not noted for their innovativeness. It may be necessary for the state department to exercise its not inconsiderable leverage as the teacher certification agency to move universities and colleges of education into making career education part of every prospective teacher's training.

State agencies are in an excellent position to assist local school systems in the identification of available resources and the promotion of new resources. The SEA is also aware of the best procedures local schools might follow in developing a broader resource base. It should be a state responsibility to communicate to local schools the availability of program materials, new instructional resources, sources of funding, and perhaps most important of all, to identify those school systems where highly successful programs of career education might serve as models or islands of innovation.

The resource management function of a state agency should also include promoting new sources of support for career education. State funding for career education, supplementing federal resources, can change the traditional overemphasis on general and academic education. The SEA should seek the leverage of state-categorical aid for career education and gain legislative authority to allocate funds to support high commitment and effective performance.

This control of categorical funding will lead local school planners of career education to work closely with the state education agency to develop programs that are consistent with jointly developed state-local priorities. Since most large school systems are under pressure to place general education dollars on the teacher salary bargaining table, many local school leaders will welcome categorical funds earmarked exclusively for career education purposes.

A large-scale effort to inform and "sell" the public will be necessary to gain early introduction of career education. The use of television, newspapers and other media, when carried out at the state level, will reach far greater numbers than when initiated as a local activity. The SEA can work with other state agencies and organizations which are not directly related to the schools but which show an active interest in career education. This would

certainly include the state departments of health, labor, industry, and natural resources.

The Role of State Leadership Organizations

How committed the State Board and State Education Agency are to career education and how effective that commitment is in bringing meaningful change will depend upon the prompting and the support those official bodies receive from influential persons and organizations throughout the state. Education itself is a large and well organized power group consisting of many influential groups. Among them are (a) groups such as the parent-teachers associations with a general mission to improve all aspects of education; (b) professional organizations representing specialized subject matter areas such as industrial arts, vocational education, mathematics, etc., (c) professional associations structured along administrative lines such as administrators, guidance personnel and teachers; and (d) student organizations. All of these should have a vital interest in the furtherance of career education and the power to help bring it about.

At least as potent and as vitally interested as these educational groupings are legislators, employer organizations, labor unions, trade associations, organizations representing agricultural interests, associations of public officials, service clubs, churches and on through an almost endless list. Much of the potency and progressiveness of American society emerges from the phenomenon of private interest groupings. What they as a whole or in major part make up their collective minds to do will happen. A critical step in the implementation of career education is to gain the allegiance of such groupings. The next most vital step is for them to organize to focus their power on the career education objective by:

1. Utilizing the organizations' own communications networks to make their memberships aware of the meaning and significance of career education.

2. Exercising a leadership role by encouraging their local constituents to actively promote career education in their respective communities.

3. Assisting local groups to identify and assess physical and human resources that can be used at both the state and local level to initiate and expand career education.

4. Coordinating local organization activities across the state and planning jointly with other state level groups.

5. Developing legislative strategies to support the goals of comprehensive career education within the scope of the purpose and mission of their own organizations.

One of the most potent ways in which the state level commitment can be tested and the state level movement can begin is by organizing and conducting a successful state conference on career education. Some states have already conducted career education conferences but few if any have called for the participation of all the relevant education, labor and employer groups who have expressed support of this concept at the national level. Under the combined leadership of the governor's office, the legislature and the chief state school officer, and supported by other influential groups, such a conference can give powerful impetus to the implementation of career education.

The purpose of a state conference is three-fold. It provides an excellent platform for recruiting, from across the state, individuals who have the capability of implementing career education at the local level. Secondly, it instructs these people in the basic concepts of career education and thirdly, it establishes a framework for local initiative and innovation for program development. While career education will evolve at the local level in a variety of different ways, based on local resources and conditions, state level organizations can support the state educational agency in constructing a flexible framework that stimulates local efforts while at the same time permitting and encouraging a cross fertilization of ideas, procedures and techniques among schools across the state.

The state conferences should provide a model that county and large school districts may wish to emulate when promoting career education at the local level. For this to happen considerable preplanning will be required. Central to this planning will be a statement of objectives the conference planners will want to achieve. This should include qualitative and quantitative criteria

such as the number of people participating as well as the extent of their participation and the position they hold in a state organization. To maximize participation and interest, a number of preconditions must be established prior to the conference and well in advance of invitations, publicity being among the most significant preconference activities.

The use of radio and television should be coordinated with the state education agency and the advertising council or similar organizations in the state. In this way the film and other media prepared by USOE will receive maximum coverage. The regular newsletters, magazines or journals published by state level organizations represent a highly useful way of making the public aware of both the need for career education and the importance of beginning the implementation process with a state level conference. The selection and recruiting of participants for the state conference should be directed so as to include those persons who occupy key positions or who have the ability to influence the direction of education and community affairs at the local level. This pool includes more than school men and school board members. It certainly should include trade union leaders, employers, officers of local service organizations and professional groups and interested persons from the public at large.

The conference should be viewed as the first formal meeting of state organizations and representatives of local constituencies who are concerned with improving educational opportunity. But it should be planned and organized to accomplish the following objectives:

a. Identify and recruit state level decision makers to a forum where they can actively participate in designing a strategy and program of career education.

b. Instruct these participants in the concepts of career education, the need for it in the local schools and a procedure for getting it implemented in every school at every level across the state.

c. Secure from each participant a commitment and set of specific suggestions as to how he as an individual and how his organization will assist their local constituents in pursuit of local implementation.

d. Train local community constituents and opinion makers so that they know precisely what to do when they return home to begin the process of career education implementation in the local school system.

For this latter purpose, the following sections of this chapter discuss the appropriate role of the local school board and school superintendent and then describe in detail the ten action steps interested local groups can follow to make career education a reality in their communities.

The Superintendent and the Local School District

If a public school system is to successfully implement a comprehensive program of career education, the local district superintendent of schools and his board of education must identify career education as a high priority and adequately fund the program. The principal and faculty members in the local school system must know that career education is a performance priority. In meetings of central office administration and in discussion sessions with the principals of the school units in the system the superintendent must express his concern and expectation that career education will be a high performance priority in the goal structure and operational objective of the school district.

To be implemented in the elementary and secondary schools, career education must have the attention and support of the central office staff. The curriculum and instruction staff must build the program's scope and sequence. The pupil personnel leaders in the central office must give priority to developing adequate counseling programs. The teacher personnel office at headquarters must plan the in-service training programs for faculty members. The public relations office must assist in the vital communications task of gaining support and understanding through working with the press and others to explain the new crusade to make the educational program more relevant through career education. The school business office and budget department must plan funding priorities to support the effort.

The central office staff should develop specific, detailed, time-phased action steps to reach certain milestone events of accomplishment in career education. The local school units need the challenge of this type of performance expectation.

Changes in most school systems will not occur unless this level of direction and commitment is made from the central office structure of the school system. Extensive discussion and exchange of ideas to gain grass roots support in every classroom of the school system must emerge from the leadership activities of the superintendent and his staff. The gaps between what is and what should be can be identified by central office leaders working with groups of schools and groups of key leaders in each school.

The action steps for implementation that follow will be brought to fruition in the schools and communities only to the extent that local education agency leadership moves to support career education with staff resources, dollars, and administrative pressure to move the system.

Action Steps for Implementation

Whether at the state, local school district, or community school system level, there are a number of specific action steps which must be undertaken if career education is to become a reality. Planners at all levels of education are usually concerned with three major factors: personnel, resources, and activities. An educational plan represents an orderly sequencing of any combination of these factors in some kind of time frame. While hundreds of detailed steps will be required for most communities to implement programs of career education, the actual ordering of these detailed steps will depend upon the unique conditions of each community as well as the skill and experience of those participating in the development of the program.

Those detailed steps cannot be foreseen here. However, ten general action steps for implementing career education are displayed on the following page as a four-phase operation (Figure 3). Though the discussion is directed to the local level, parallel steps can and should occur at the state level.

Phase I, involving the first two action steps, is devoted to establishing the preconditions required for the new concepts and innovative processes to gain a footing. In this first phase, the emphasis is on defining the goals and developing a strategy for selling the program as well as identifying the "shakers and movers" who can make the program a success. The objective of Phase II, with its three-action steps, is to organize resources in preparation

Phase I

1. Organize the appropriate interactive network of interested individuals and groups.
2. Promote an understanding of the concepts of career education and establish appropriate educational objectives.

Phase II

3. Study the current educational system to determine the changes necessary to turn it into a true career education system.
4. Inventory and marshal all available resources.
5. Design the career education system most appropriate for your community.

Phase III

6. Gain the cooperation of all necessary organizations, institutions, and individuals.
7. Implement the system.
8. Build in an evaluative process to determine how well the system is working.

Phase IV

9. Create a feedback system to use evaluation findings to adapt and improve career education programs.
10. Make provision for a program of maintenance to sustain early initiative and tie these activities into the interactive network.

FIGURE 3
Ten Action Steps for Implementing Career Education

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for a program of action. Phase II is primarily concerned with the actual conduct of programs and learning activities in career education. Full-scale and intensive implementation should be launched by the three action steps of Phase III. The final phase is given to program evaluation, improvement, expansion, and maintenance. The last three action steps are intended to tie back into the first action step; that is, these final steps "close the loop," making it possible for this new system to grow and expand in response to new opportunities and changing local conditions. Full implementation is an attainable objective but one that requires an early start and frequent initiatives. Responsibility for launching these initiatives can be assigned by the school board to the school administration, or interested citizens can begin the planning process on a voluntary basis. The critical factors are that someone take the initiative and a combination of school and community leaders become involved.

Action Step One: Organize an "Interactive Network" of Interested Groups

Interest and personal commitment are the two qualifications for participating in the planning and organization of local programs of career education. However, the design, development, and expansion of this new program will not achieve its full potential if local school systems or state educational agencies work in isolation from each other, or if the school functions apart from other groups or agencies in the community. The cross fertilization of ideas and concepts and the transfer of successful methods and similarities of experiences are essential. The need for an approach built upon a foundation of local initiative and fostered and encouraged at the state, regional, and national level has already been recognized by leaders in education, business, and labor. Governors, chief state school officers, state directors of vocational education, and the National Chamber of Commerce have all endorsed the concepts and principles of career education. The American labor movement, at every level from its national headquarters through state federations and individual locals, have consistently supported an educational philosophy and program built upon the goals of preparation for useful employment, service to others, and personal satisfaction and fulfillment. All of this support and momentum must be coordinated and fully utilized.

No new agencies need be organized to coordinate the energies or the flow of information and resources to be assigned to

career education. What should be fostered is an interactive network that ties local schools and interest groups together on an informal basis. While it is useful to learn what other schools are doing, it should prove more productive and rewarding to concentrate on organizing and fostering local activities to take advantage of local talent and resources. A public information program should be designed to promote the concepts, stimulate interest, and call for active participation by all community interests. The promotional program should be a joint undertaking carried out in cooperation with as many parties in the community as can be interested and recruited.

USOE and other educational agencies and organizations have developed useful informational materials that can be used to promote career education at the state and local levels. A bibliography listing some of this material can be found at the end of this handbook. But promotional activities should reflect a local input which should be aimed at a local audience. The film "Career Education" has been designed for use by commercial television and will meet the needs of local stations to provide public service programs. Radio stations have a similar public service responsibility and can be used as an excellent medium to promote career education. The audio component of the film with a few deletions and the full tape of the slide-tape show "Career Education: Steps to Implementation" are appropriate for radio use. Local newspapers are always interested in school affairs.

The promotional activities must do more than create public awareness of career education; they must stimulate interest and action throughout the community. Early in the promotional program, planning should begin for recruiting interested parties from the community to participate on a career education advisory committee. The particular interest groups that may wish to participate in the planning and organization of career education may prove to be unmanageable if viewed as separate entities. A pragmatic approach calls for organizing these numerous interest groups into five major categories:

1. Parents and organizations with a particular concern for the home and family

2. Educators for all levels

3. Employers, trade union leaders, and other parties representing business and labor

4. Representatives from public agencies and elected officials

5. Other organized groups in the community, such as the service clubs and the retired

If school personnel find some difficulty in opening their professional doors to the community, they may learn that most members of the community will not be particularly enthusiastic or responsive to an open invitation to work for educational improvement, unless they fully understand why their participation is necessary and important. The number voting in school board elections or active in such groups as the local parent-teacher association is a useful measure of community interest in school affairs. The educational philosophy that the school should and could meet the needs of children that were not met in the home has gained wide acceptance. While this may have first been intended for a small number who required basic nutritional supplements or minimum health care, the democratic nature of the school soon extended these services to all children. Any desirable change in direction can probably be accomplished if broad-based community support can be promoted. Career education provides both the school and the home with an opportunity to reassess their respective roles and to establish a healthy and viable partnership that will not only benefit the student but will strengthen the tie between home and school.

Parents, Home, and Family

A child's awareness of the world of work begins in the home, and it is here that attitudes are first formed. The school can certainly profit by building upon these early experiences, especially when the experiences are integrated into the formal program of instruction. For those with active religious affiliation, churches too have a deep concern for family solidarity and welfare and should be interested in promoting a cause that can strengthen the long-run foundations in the home.

Educational Personnel

Every person in the school system has a role to play in career education: school personnel including professionals,

noncertificated staff and students at all levels, and school board members. While the classroom teacher may spend most of his time with students in the classroom, the school counselor, nurse, custodian, gardeners, and educational administrators can also bring to the planning of career education an infinite variety of skills, interest, and valuable resources.

Business and Labor

Business and labor leaders have been active in some specialized fields of education. Industry advisory committees have been helpful to vocational education in planning programs in newly emerging occupational areas or evaluating and upgrading programs in the established occupations and crafts. Representatives from business and labor should be approached on two levels: (1) for general community or industry support and (2) for their expertise in a specific industry or a particular occupational field. It should be self-evident that any program concerned with education for a career must make provision for active participation by persons familiar with the industrial and labor relations process and with the skill requirements of particular occupations. Of equal importance is the role industry can play in providing the school with opportunities to observe working situations or to engage in actual employment.

Elected Officials and Public Agencies

Every elected official is sensitive to the fact that education generally represents the largest single expenditure of local and state governments. Career education should not be promoted on the basis that it will lower costs. It is very likely to increase school budgets, at least in the short run, while increasing the quality of education. However, much of formal education has traditionally consumed substantial local resources without returning to the community any tangible results. The taxpayer is no longer indifferent. School budgets are under close observation by many community groups. A key feature of career education is that it can provide service to the community whenever and wherever such services provide a useful learning experience. This service element can be implemented by joint cooperation between school and public agency leaders.

Participation by public officials in locating, facilitating, and monitoring these valuable learning and service experiences is of the

utmost importance. Furthermore, their active participation in the planning and development of career education will provide wise and mature guidance to the program, while at the same time enlisting the support of key groups.

Service Clubs and Other Special Groups

Service clubs are always seeking opportunities to serve the community. In addition, their members are also influential in many other walks of life. Their involvement can be doubly potent. Boy scouts and other youth organizations are anxious to improve the long-run welfare of their charges. Senior citizens in every community are anxious to be of service.

Men and women with one career behind them represent a rich and valuable resource that can be and should be used fully. Many of these senior citizens have mastered skills and crafts that are in short supply. Others have skills in the use of tools, materials, and processes that are no longer practiced in the modern labor market, but they can still serve as the basis for children and young people to learn important job skills and recreational or leisure time skills. Perhaps more important, senior citizens often need to be of service and to be wanted. Working with senior citizens to get to know their special needs is in itself a great learning experience for any child, youth, or adult.

Career education is an expansion of the regular school curriculum and, as a bold and imaginative new concept, can profit from the experiences of these and other community groups. Each community will have unique characteristics and special groups that should be identified and recruited to this family-school-community based program.

The fundamental principle underpinning the interactive network and perhaps its most attractive virtue can be briefly summarized. It calls for the sharing of information, materials, ideas, and technology in career education among schools and communities at all levels. It provides an alternative to creating new and possibly duplicating institutions. It taps those who are already the "shakers and movers" of the community and those with the most reason to develop commitment to a key issue of mutual interest: career education.

Action Step Two: Gain an Understanding of Career Education and Establish It as a High-Priority Objective

The film which accompanied this handbook sought to establish the need for career education and provide a broad exposure to the concept. The slide-tape presentation had as its objective the illustration of what USOE is doing to introduce career education nationally. The intent of this handbook is to provide a basic framework for the design and implementation of career education at the local school and community level. Within this framework local ideas and energies will create a variety of career education programs that draw upon local interest, resources, and opportunities. Because these factors differ among communities, educational programs designed to equip people with saleable skills will differ when it comes to the selection of specific occupations requiring specific skill training. On the other hand, many of the attitudes and understandings about the world of work and career decision-making merit general application. The precise response must reflect a community view, but the national perspective offers local school planners a sense of direction.

If we are to provide intelligent direction of the energies and enthusiasm to the people recruited and organized as part of Action Step One, they will need to understand more than the definition and need for career education. They will require a working grasp of the components, the principal actions, and the program objectives. While understanding of the major concepts can be at a general level, it is essential that the planners of career education reach agreement on the model they hope to develop and the parts of the model program they hope to emphasize. This handbook is aimed at promoting local initiative and imagination rather than supplying classroom curriculum. Items in the bibliography or observation of what others have done can supply further ideas, but ultimately each community and school must "do its own thing."

The second part of Action Step Two calls for establishing career education as an educational objective of high priority without slighting or deprecating the worth and importance of other sound educational goals. Educational objectives provide direction and bench marks for measuring progress. While the first part of Step Two is concerned with the process of career education, this second part focuses on the need for defining objectives. Educational objectives are derived from policy, and

educational policy is usually determined by school boards or the legislature. The following policy statements serve as examples of simplicity and brevity.

Assembly Bill No. 102—Chapter 713

An act to add section 7504 to the Education Code, relating to educational opportunities. Approved by Governor on August 24, 1971. (Filed with Secretary of State on August 14, 1971.)

The People of the State of California do enact as follows:

> The Legislature hereby recognizes that it is the policy of the State of California to provide educational opportunity to every individual to the end that every student leaving school should be prepared to enter the world of work; that every student who graduates from any state-supported educational institution should have sufficient marketable skills for legitimate remunerative employment; and that every qualified and eligible adult citizen should be afforded an educational opportunity to become suitably employable in some remunerative field of employment.

The Los Angeles School District resolution adopted October 28, 1971, supported this action to read as follows:

> We believe that it should be the policy of our school district to provide career education for all youth and adults of the district, to the end that no student drops out of school who is not prepared to enter the world of work, that no student graduates who does not have saleable skills for productive work or college education, and that no adult is denied an educational opportunity to become properly employable.

These two statements clearly establish career education as a priority for a large state and a large city school system. Both statements reflect a commitment and provide a sense of direction without defining an end product. The two statements suffice as statements of policy but they have serious deficiencies as educational objectives.

To be useful, any educational objective should be practical and attainable, should have simplicity of statement and ease of understanding and should measure progress with acceptable accuracy.

The statement of educational objectives is the heart of the career education plan. It can be compared to a road map or

navigation chart—the more detailed and comprehensive, the more certain the school and community can be in their new direction and the more confident they can be of their progress.

Action Step Three: Study the Current Educational System To Determine the Changes Necessary To Turn it into a True Career Education System

Many school systems conduct ongoing programs of self-study and evaluation for the purpose of improving the instructional and extracurricular programs. Career education will provide these study groups an opportunity to engage in a reexamination of the purpose and functions of many existing programs and courses. In those communities where self-evaluation has not been carried out on a frequent basis, career education offers an opportunity to educators and community leaders to examine the schools in order to determine where improvements can be made, how the process and goals of career education can be implemented, and how the school can take advantage of off-campus community learning resources.

At times in some communities there is a tendency to claim that the local schools already offer educational services and special programs that in fact do not exist for any significant number of students. Such claims are not meant to be false or defensive; they are often based upon a simple misunderstanding of new educational concepts. Career education is not a modification of industrial arts, nor is it meant to supplant many of the useful programs and courses found at every level of education. Career education represents a new philosophical foundation for giving new direction and relevance to programs in the formal school and recognition to new forms of learning off the campus in the community. Its primary purpose is to prepare children, youth, and adults for productive and satisfying employment.

It may be true that your school is well on the way to offering a high-quality program of career education at every grade level, including adult retraining and career counseling. If this is the case or if your school system is freshly embarking on career education, you will want to devise a set of instruments to help you and other members of the community examine just what educational opportunities exist that are intended to assist people to acquire saleable skills and to make career decisions.

If the school provides all students with the tools they need to make effective career decisions, there must exist a well-defined and observable process that can be measured against some set of standards. A highly useful but simple tool to assess how well a local educational system is performing is the graded scale of which two simple examples follow:

The career education program includes an orientation to job and work situations.

0	1	2	3	4
No students are exposed.	A minority of students are exposed.	A majority of students are exposed.	A substantial majority are exposed.	All students are exposed.

Applying job skills either in simulation or on the job is an element of the career education program.

0	1	2	3	4
No students are exposed.	A minority of students are exposed.	A majority of students are exposed.	A substantial majority are exposed.	All students are exposed.

A similar set of graded scales can be prepared to aid in assessing every facet of the school administration, faculty, instructional and guidance programs, extracurricular activities and use of facilities including classrooms, laboratories, shops, gyms, and off-campus resources.

The open-ended question is the traditional method for recording observations and collecting information. Its weakness is the difficulty one encounters in assigning a numerical value to the data collected. A recent national survey of career education by the Center for Occupational Education at North Carolina State University used the open-ended question to identify possible exemplary programs of career education. These same questions and similar ones which could be added should prove useful for any local educational system interested in determining the changes necessary to start a program of career education or expand early efforts.

1. What percent of the students in the school are directly involved in each segment of your career education program?

2. Briefly list and describe the main goals and objectives for the overall career education program and each segment in the program.

3. How is the career education concept being assimilated into the educational program? (E.g., strategies for installation.)

4. Briefly list and describe those features particular to your career education program for the various segments at different grade levels.

5. Briefly list and describe the curriculum changes which took place in implementing the career education program.

6. What supporting services (e.g., guidance, counseling, placement, follow-up) are available to the students in each segment of the career education program? To what extent are these available to all students?

7. What in-service training was provided for administrators, teachers, and staff in implementing the career education program?

8. Identify and explain how community resources were utilized in planning, establishing, operating, and evaluating the career education program.

9. What opportunities are available to students in the career education program for job preparation?

10. Briefly list and describe the data that are being gathered as evidence of success or failure of each segment of the career education program.

11. What provisions have been made for placing students in jobs and/or further educational programs when they leave school?

Action Step Four: Conduct an Inventory and Marshal Community Resources

A number of conventional educational programs already make use of community resources for off-campus learning. Visits to museums, parks, and places of historical significance constitute a valuable but traditional part of most school programs. Work-study and cooperative education have been a part of vocational education for nearly a half-century. What is innovative about the use of community learning resources for career education? That will depend upon the imagination of conceptualization, the intensity of use, and the practicality and career relevance of the experience. Needed resources consist of physical facilities such as space, equipment, and access to work stations, as well as a vast pool of human talent. There is in every community a growing number of retired persons with rich and valuable experience in almost every career field. Service clubs and similar organizations represent another form of human resources. Despite the extensive learning resources available in every community, very few schools have actually begun to make effective use of the many talented individuals residing in the community and willing to be of service to the schools.

Before these human resources or the off-campus learning resources can be used, they must be identified. A proper identification will record the availability of each resource and describe in some detail precisely how the particular facility, individual, or material might be used to provide an appropriate educational experience. Figure 4 is a simple form for collecting information on individuals who are available to serve in an expanded program of career education. This form has been successfully used in small towns and in neighborhoods in large cities; however, the unique characteristics of every community may require that a questionnaire be especially tailored to collect local data. The questionnaire can be adapted for use with firms and other organizations.

Professional educators and persons with training in the field of education should be involved in the resource identification process because they will be able to appraise the potential for learning experiences and can evaluate off-campus activities and resources. Marshaling these resources begins with the evaluation, classification, and analyses of the resource data collected. The

FIGURE 4

Community Resources Questionnaire

COMMUNITY RESOURCES QUESTIONNAIRE

The Career Education Advisory Committee is studying various ways of enriching the educational program of the _____ schools. One way to widen the students' educational opportunities, particularly in learning work skills, is to use the resources of the community. The purpose of this questionnaire is to find out what interests and talents the people of _____ would be willing to share with their young people. Once this information is on file, then it will be possible to match up an individual's special skill with a student's particular interest. Would you be willing to have this questionnaire kept on file at the _____ School so that in the event of a particular need or interest, you might be contacted? Yes No

NAME_____

ADDRESS_____ PHONE _____ _____

FIELD OF INTEREST (cite occupation or industry, arts and crafts, science, public service, business, trade union)

_____

SPECIAL SKILLS:_____

WHAT SIZE GROUP WOULD YOU LIKE TO WORK WITH?

_____(large: 20 plus) _____(medium: 5-20)

_____(small: 2-5) _____(individual: one to one)

HOW MUCH TIME WOULD YOU BE WILLING TO GIVE?

_____Once a week _____Number of hours

_____"Hands on" training (every day over a period of several weeks)

_____Occasional (lecture or demonstration for a specific topic)

_____Other

CAN YOU VOLUNTEER YOUR SERVICES?_____ IF NOT, TENTATIVELY HOW MUCH WOULD YOU EXPECT TO BE PAID?_____

I understand that this information is merely exploratory and does not bind me in any way. If there is a need for, or interest in, my services, I shall be contacted and further arrangements will be made.

Signed_____

Please return completed questionnaire to the person who gave it to you -- or to
John Doe Career Education Advisory Committee
Post Office Box 707, Random Town, U. S. A.

actual marshaling of community resources is a continuous process, but in this step the process begins by confirming the availability of those resources judged most appropriate for meeting program objectives.

Marshaling resources also includes reallocation of educational expenditures. While the career education advisory committee as such will have no control of the level and distribution of school budgets, as school board members, school administrators, citizens, and taxpayers, the committee members all have "clout" if they organize to aggressively use it. Once again, career education is not all there is to education, but it is a high priority. Careful examination of any school or school district budget will identify many expenditures of lesser priority than the alternative uses in furthering career education.

Action Step Five: Design Preliminary Program of Career Education

With a general understanding of career education formulated at the local level and a detailed set of statements of desired goals and objectives, added to a knowledge of available resources, a community is prepared to design new programs of instruction in school and to arrange for career learning experiences in this community. Program planning at this early stage should be exploratory and experimental. The design of career education programs will require considerable expertise in at least the following fields:

1. Preparing instructional objectives
2. Curriculum design and development
3. Pupil personnel services, particularly in vocational guidance and counseling
4. Education professional development, especially in-service teacher training
5. Early childhood development and human ecology
6. Community interaction with business, labor, and other leaders and organizations.

Some of this expertise will come from the present school staff. A great deal of the needed expertise can be and should be recruited from the community. In 1970, for example, there were more than 400,000 registered nurses who classified themselves as "full-time homemakers," distributed across the many communities of the country. They are an indication that every city and town and most neighborhoods have representatives from a variety of occupational categories and industries who can be helpful in designing educational experiences relating to the world of work and careers.

A local office of the state employment service represents another form of expertise that can form a partnership with the school's guidance personnel in order to design informational packages and programs based on available and emerging areas of employment in the community and surrounding labor markets. Many additional examples could be cited to suggest who might cooperate in the design of career education programs. The shape of programs, their quality, and the rate of progress in achieving early goals will depend to a great degree upon how much information is made available to the community and how successful planners are in using all relevant resources.

The emphasis of Step Five should be on developing a "plan for planning" more than on introducing programs of instruction. But this step represents a transitional activity. The first five steps have been concerned with establishing the preconditions necessary for implementing career education at the local level. The next series of action steps suggest procedures for moving into actual program implementation.

Action Step Six: Establish a Cooperative Relationship among the Participating Organizations, Institutions, and Individuals

The purpose of this step is to achieve cooperation among all of those in the community who are essential to the implementation of a program of career education. Five major groups have already been suggested in Step One, but every community will want to develop its own lists of "shakers and movers." To achieve this goal, a series of substeps are recommended. Emphasis is given to the use of nonschool talent and facilities.

This may be a new approach in education. The traditional character of the school and formal education in most communities suggests that a conservative approach to the planning of present change will meet with less hostility than a call for major surgery. The organization of interested individuals from the community represents an activity that can be structured according to conventional school and community patterns, yet at the same time be utilized to bring about dynamic change.

While the purpose of this step is to gain cooperation among the many diverse elements in the community, the suggested procedure for achieving this is through the formation of a school-community career education advisory committee. The purpose of this committee is to advise the local school boards, the school administration, the faculty, and the community at large of recent developments, needs, and future plans concerning career education in their school and community. However, the advisory committee can have more than advisory responsibility. It can provide both the leadership and energy for moving all elements in the community toward the full implementation of career education.

The following are minimum elements of such a committee:

a. *Steering subcommittee:* Functions as an executive body providing general direction, coordination, and reporting to official bodies and agencies in and outside the community. It calls all advisory committee meetings and assigns major roles and tasks to the other working groups.

b. *Visitation subcommittee:* Contacts other schools and communities and visits other programs that are under planning or in actual operation. The visitation subcommittee also collects information and reports on its observations and assessments.

c. *In-school or on-campus subcommittee:* Works with faculty, students, and community resources to introduce change into the existing program of instruction and determines how career education can best fit into the regular formal educational system.

d. *Off-campus subcommittee:* Identifies learning resources in the community but outside regular school facilities. Its

function is to make provisions for assessing these on-campus resources so that they can be available as useful learning experiences in career education. The off-campus subcommittee makes its findings and recommendations available to the committee as a whole, thus providing alternatives to on-campus or to in-school educational programs. Its first major task is the administration of the community census briefly described in Step Four.

The substeps leading to committee organization are simple and straightforward. Following a program of public information, when community interest is at a high point, community and school leaders can call for an organizational meeting to establish the career education advisory committee. Membership on the four subcommittees described above can be voluntary, or certain individuals may be assigned to specific committees in order to provide adequate balance and expertise. Those persons responsible for calling this organizational meeting will probably be the same persons who carried out the original study and the planning activities described in the first five steps of this implementation plan. Because of this early experience, they will be in a position to develop a detailed agenda, including supporting materials and documents for use in the organization meeting.

The committee organization reviewed here represents a model that has proved successful in a number of local school systems in various parts of the country over the past few years. Of equal likelihood is the desire of local school systems to create their own committee structure and assign responsibilities accordingly. Most likely the in-school and the off-campus subcommittees will attract the largest membership and will be expected to carry out the most complex and numerous tasks.

The steering subcommittee functions in an executive capacity; the visitation subcommittee functions in a narrowly defined but vital role as it seeks to learn and assimilate the concepts and components of career education as they emerge in practice and in the literature. The functions of the two, large, working groups are varied and many. A few specific examples may illustrate the worth of the in-school and off-campus subcommittees.

The In-School Subcommittee

The following is a model of the assignment which might be given such a group: The purpose of this subcommittee is to study the existing instructional program and on-campus resources to determine the most effective method for adopting appropriate elements of career education. Membership on this committee is open to students, faculty, school administrators, and interested parties from the community. The following is a tentative list of activities this committee has been asked to investigate:

1. A key task of this group will be the formulation of goals, objectives, and expected outcomes to be achieved through career education. Because of the experience and expertise of professional educators in the writing of educational specifications, it may be possible that the in-school subcommittee can provide examples of goal statements and precise objectives stated in measurable terms for use by all of the working committees.

2. The identification of instructional resources for use on campus is an activity to be coordinated with other working committees. This activity will require the design of data collection instruments to properly record existing resources and to tentatively assess ongoing programs. Following the collection and analysis of information that describes existing resources, the in-school subcommittee in cooperation with the steering subcommittee will begin the design of new programs.

3. When new goals are set and the direction and general content of new programs have been determined, decisions will have to be made covering a number of highly important program elements. So that these decisions will be made systematically and will reflect broad consensuses, attention would be given to the assignment of any working subgroup who may share responsibility for making recommendations on the following subtopics:

   a. What changes are required in existing courses, their organization, and content to be more relevant to student career needs?

b. What new courses should be offered?

c. What changes are required in existing programs, including new and existing courses?

d. Is it necessary to design totally new programs and all new courses?

e. What consideration should be given to alternative staffing of existing courses and new courses?

f. Is it possible to make use of vocational education personnel and academic instructors for cooperative teaching?

g. Is it possible to make use of academic and vocational instructors for cooperative program planning?

h. To what extent can the schools use nonschool personnel in regular courses of instruction?

The Community or Off-campus Subcommittee

The primary purpose of this subcommittee is the identification, organization, and development of career education learning experiences that are available out of school and off campus. Off-campus learning activities are not suggested as means for eliminating traditional classroom and shopwork. They are recommended as a means to expand curriculum resources to include the wealth of human talents available in all communities as well as to make greater use of local facilities and institutions where students can acquire useful skills while providing valuable services. Membership on this subcommittee should include a few educators who can provide a liaison role to the other working committees, particularly the in-school subcommittees, as well as provide professional advice to nonschool personnel.

The general goals and objectives developed by the in-school and steering subcommittees can be used as guidelines for the off-campus subcommittee. It is possible that certain objectives can be best achieved through off-campus learning activities. For example, many of the service activities students undertake in the

community may prove to be more meaningful and comprehensive than anything the school might provide during regular classroom instruction. Many of the off-campus learning activities will not include a service component but will emphasize a particular academic or specific job skill. What these particular skills might include will depend upon the extent and quality of activities and learning resources the off-campus subcommittee successfully recruits to the career education program.

The most significant activity the off-campus subcommittee will undertake is the census of community learning resources. This census will classify and tentatively assess identifiable off-campus community learning resources, including volunteer instructors and any other situation that lends itself to learning skills and attitudes related to the world of work. The census form introduced earlier can be completed under the direction of the off-campus subcommittee, using parents, students, faculty, and any other interested parties capable of identifying community learning resources. The census should be viewed as a continuous process rather than a one-time affair.

Action Step Seven: Implement the System

All ten action steps are part of the actual process of implementing career education at the school system level. However, there must be a point at which actual classroom and community instruction begins. The recommended working subcommittees need a target date that specifies when significant events and activities are to take place, and particularly when career education instruction will actually begin in the classroom and in the community. This means that when the calendar date for Step Seven comes up, the following substeps will have been completed.

1. Contact will have been made with state educational agencies and available guidelines and state policy endorsed by local education authorities.

2. A compendium of educational objectives will have been established at every level where career education is to be implemented in the first target year.

3. The process of career education will have been examined by school personnel and community resource persons

and experimental programs tried and evaluated on a limited basis.

4. An evaluation of existing school programs and activities will have been initiated, resulting in recommendations for changing specific parts of the curriculum.

5. Professional personnel and community educational resource persons will have formulated new strategies and programs, and teachers will have received whatever in-service retraining is required.

6. New programs and activities will be ready for implementation. Detailed descriptions will be available for every new course or learning activity concerned with career education.

7. Estimates of faculty time and the need for special equipment and facilities will have been determined and funds will have been provided.

8. Detailed budgetary procedures will have been followed for determining the cost of new programs and activities.

9. Cost-saving measures will have been recorded, particularly from those courses, programs, and activities that may have been deleted from the original program of instruction.

10. Following an analysis of cost and benefits relative to new programs and activities, alternative strategies will have been examined to permit the phasing of courses, programs, and activities of high priority into immediate operation while assigning new implementation dates to activities of lower priority.

Each of the ten general substeps listed above are made up of specific tasks. The identification of tasks and their analyses (that is, what is involved or required to complete the tasks) will provide the planner with information as to who should be assigned responsibility for completing the tasks, how it should be accomplished, what resources will be required (e.g., tools and facilities), how much time will be required, and what it will cost.

In brief summary, Action Step Seven is intended to establish a target date for implementation and should be regarded as a firm taskmaster. Such a date provides all parties with a common reference point for measuring their progress. A target date for implementation is also a "hidden persuader" that permits the planners and implementers an opportunity to systematically review the progress achieved in moving concepts and resources in action programs. A framework for reviewing this progress can be prepared by setting out a detailed set of questions and tasks that fixes responsibility, assigns resources (including costs), and sets time constraints for their accomplishment. The specific questions and tasks will reflect the unique nature of each local program of career education.

Action Step Eight: Develop a Program of Evaluation

The purpose of this step is to permit career education planners, administrators, and participants to systematically assess and measure program progress and to determine what modifications or adjustments might be required to achieve program goals and objectives. As in several other steps, the evaluation planning must begin earlier, but it is during Steps Seven and afterward that evaluation must be corrected. The care and precision used in originally describing goals and objectives as suggested in Step Three will determine, to a great extent, the degree of accuracy to be expected when measuring program achievements. The specification of goals and objectives is a continuous process that begins just as soon as a planner understands the policy he is expected to implement, the direction he is to pursue, and the process he is to use.

In planning a program of evaluation, planners of career education have an opportunity to reconsider program goals and objectives, if for no other reason than to restate these objectives in terms that permit their being measured. For example, an early goal statement might be ". . . provide for occupational competence." How can one measure the attainment of this goal? Preparing goal statements requires a degree of precision that permits one to measure effectiveness; that is, actual performance. Placement on the job and satisfaction on the part of both the new employee and his employer represent examples of measurable criteria.

Among the most common techniques for evaluating education and training programs are: (1) direct solicitation of the

reactions of the participants, including students and community persons; (2) individual and group tests to actually measure progress and achievement in any phase of the program; (3) performance tests or observation of a student actually demonstrating his ability in the use of a skill; (4) comparison of results of new techniques and procedures over older or traditional methods; and (5) observation of the education process to determine problems and remedies. The ultimate evaluation of career education will not be achieved until enough persons have traversed the full system from early childhood throughout their working lifetime into retirement. Only then can society have a valid comparison of the old and new in career development. In the meantime, interim evaluations are necessary to keep the system tested and improving.

The design, development, and use of evaluation procedures can be performed by anyone capable of organizing a logical framework for identifying goals and then measuring the progress made in achieving these goals. The close relationship among goal statements, evaluative criteria, and performance standards cannot be overemphasized. The more often one is willing to refine goal statements, the greater precision one can anticipate when measuring the progress achieved in attaining these goals.

Action Step Nine: Create a Feedback System To Use Evaluation Findings To Improve Career Education Programs

Evaluation determines how well the system is performing and pinpoints where improvement is required. Feedback is concerned with taking the results of an evaluation and applying them to correct or improve any part of the system requiring it.

Feedback systems have to be developed for every element in the system. When students are tested, the results of their achievement should be shared not only with the student himself but also with all of those persons directing the particular learning experience as a measure of the effectiveness of that activity. In this way the program itself can be monitored to determine where and how change might be introduced.

The school administration and local school board have legal responsibility for all elements of formal education in the community; however, they are not in the best position to provide

detailed monitoring of program activities. The career education advisory committee can play a central role in the feedback process. For example, it can assign students, faculty, and community representatives to working committees coordinating the work of educators so that every element of the program can be systematically measured, problem areas identified, and recommendations formulated to take action when and where required. These elements should include at least information on students, the instructional programs, and community resources.

Students

Perhaps the standard report card is the oldest and most conventional form of feedback. It records evaluation results (good or bad) and sends these data home and keeps them recorded in the formal system. In some schools there is very little explanation on the grade card that would explain to students or to anyone else the meaning of each grade or how progress can be made in the future. A student-based feedback system would diagnose student progress, record those areas where improvement is required, and specify how a student can make these improvements.

Student Self-Kept Records

Because of the importance of skill acquisition and need for students to develop the ability to make and act on career decisions, there is a special need for students to learn how to keep up-to-date records on their own personal achievements and how to interpret the data. This sytem of personal record keeping can begin in the early grades with very simple forms and in later years record the information students need to reflect on what events, activities, and experience influenced their early career.

The Instructional Program

All of the key components of the instructional program and process that have been assessed originally in Step Three and evaluated in Step Eight should be considered as potential information elements to be included in a feedback system.

What actually is elected to go to the career education advisory committee as feedback data has to be predetermined by criteria that take into account at least the following questions:

What information is needed to pinpoint problem areas? How should it be collected and recorded and to whom should it be sent for utilization? What data are required to identify effective innovation and successful learning experiences for the purpose of replication in other parts of the system? What data standards and procedures need be created to provide for a system of incentives to stimulate and reward improvement and expansion of career education opportunities?

Community Resources

The census of community resources identifies what is available at a particular period of time. The evaluation process measures the quantitative and qualitative factors associated with these resources. The feedback system should be concerned with upgrading the inventory of community resources and reporting to all relevant parties the results of any evaluation of these resources.

In summary, the actual design of a feedback system will have to be tailored to meet the specific information needs of planners, administrators, and participants of local programs while at the same time providing for two-way communication between the local schools, other schools, and the appropriate state agencies.

Action Step Ten: Make Provision for a Program of Maintenance To Sustain Early Initiative and Tie These Activities into the Interactive Network

This final action step will close the planning and implementation loop so that selected early initiatives can become institutionalized within the local school system and community. Selection of these key elements should begin whenever it is possible to make judgments concerning the impact and contribution each element makes to the learning process. These elements will center on the administrative process, the instructional program, and counseling and guidance services. In this action step, these three groups of elements must be examined to determine how a local school system in partnership with its own community can cooperate and interact with other schools and state level agencies to improve and expand the career education process.

The administrative process is concerned with leadership, organization of resources, and overall program management. The

instructional program is concerned with providing learning experiences in school and off campus in the community. The guidance function is intended to provide students with the experience and information required to make and understand why they make particular career choices.

In Step Nine the emphasis was on communicating essential information back into the system for corrective action, for improving parts of the system, and for rewarding all effective facets of the system. In this final action step the emphasis is on expanding and maintaining the system. As information becomes available through evaluation and as it is communicated through the feedback system, it is directed to specific working committees or to individuals who have responsibility for taking action. These actions cannot be determined in advance, but it can be anticipated that they will be of a particular nature. For example:

1. Some activities or programs including students and resource personnel may have to be dropped from the program. Whatever the causal factors, it is essential that activities that do not meet student needs at a predetermined or adjusted level of performance be eliminated.

2. Other programs may have to be modified to accept additional students or to take advantage of available resources

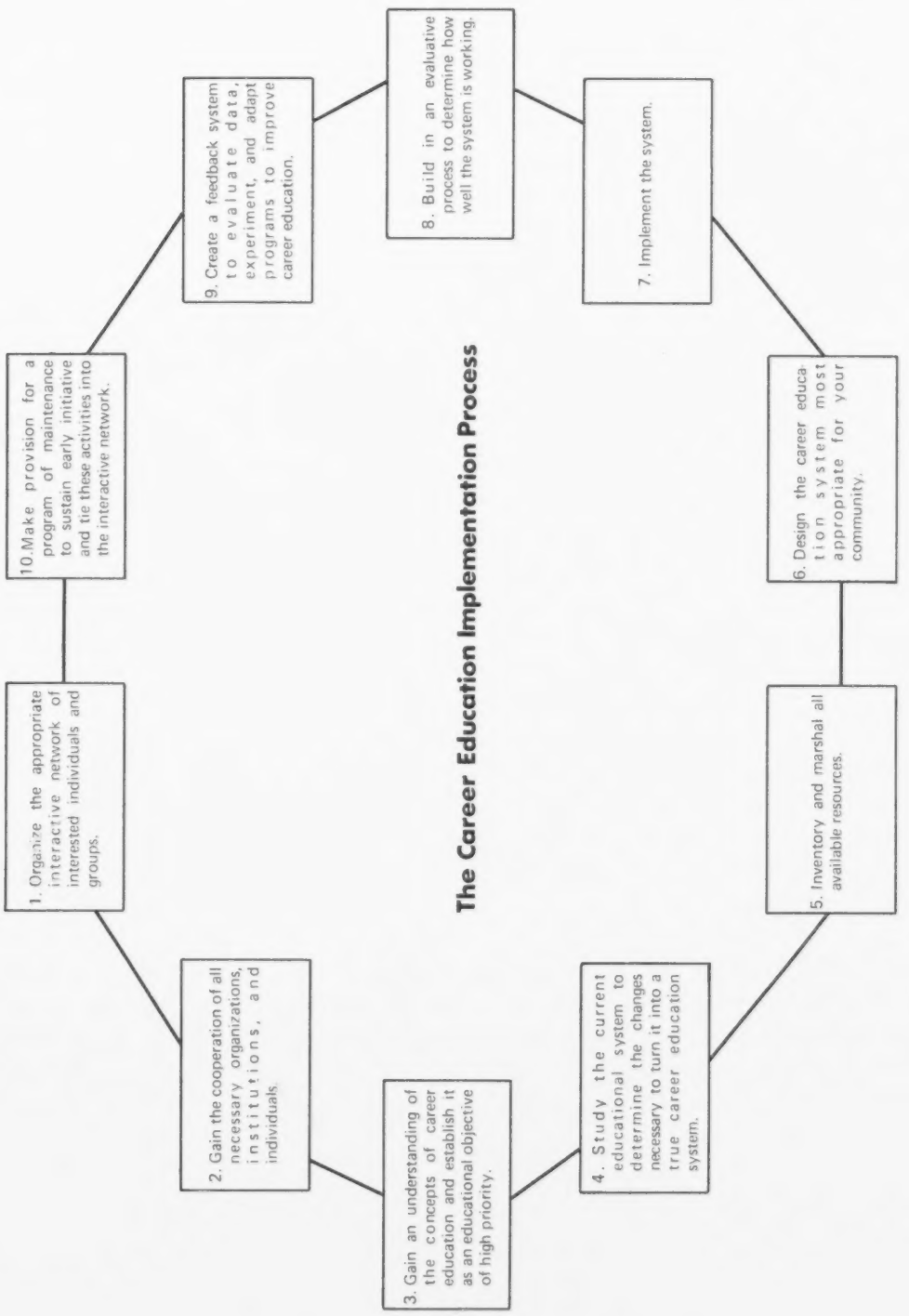
3. New activities will have to be added if the program is to grow and meet additional student and community needs.

4. If outside funds are used, there may come a time when these will disappear so plans should be made to incorporate vital features of the career education program into the regular budget as rapidly as possible.

In summary, the local-level process of career education is not a one-time process but a continuing task of trying, learning, redoing, and improving that will not end until every student can be given reasonable assurance of a successful lifetime working career (Figure 5).

FIGURE 5

The Career Education Implementation Process


The Career Education Implementation Process
1. Organize the appropriate interactive network of interested individuals and groups.
2. Gain the cooperation of all necessary organizations, institutions, and individuals.
3. Gain an understanding of the concepts of career education and establish it as an educational objective of high priority.
4. Study the current educational system to determine the changes necessary to turn it into a true career education system.
5. Inventory and marshal all available resources.
6. Design the career education system most appropriate for your community.
7. Implement the system.
8. Build in an evaluative process to determine how well the system is working.
9. Create a feedback system to evaluate data, experiment, and adapt programs to improve career education.
10. Make provision for a program of maintenance to sustain early initiative and tie these activities into the interactive network.

Final Comment

Given the rising national interest, the outflow of a massive volume of literature from government university, and private publishing sources can be expected. As experience is gained, specific examples will become available for dissemination, exploration, and replication. As an interim step, it is hoped that the handbook has given the reader insights into the following:

1. A general understanding of the concepts and components of career education
2. A conviction that career education is one of several needed education reforms and has real potential for contributing to the solution of a number of social ills
3. An understanding that career education is not just the latest public relations fad coincident with a particular administration within USOE but is the result of long-term experiment and experience, much of it fostered by USOE
4. An idea of what career education might look like when applied in a particular school system guided by state and local initiative
5. An intention to take specific actions immediately at the state and local level, commensurate with the individual's role in the school or social system, to implement career education where it counts: in the home, the classroom, and in the community
6. A "how to do it" knowledge of organization and procedures to get implementation under way.

Career education can contribute to the productivity and adaptability of U.S. economy. It can help ameliorate social unrest and labor market deficiencies. Most important, it can make a substantial difference in the lives of children exploring their own potential, youth seeking an adult role, and the adults searching for a more attractive one.

The critical issue for the present at the state and community level is "From whom will the leadership come to get things started and when will it occur?" Career education is an idea whose time has come. But it will not come to your community until someone grasps the initiative and brings it there.

If someone, why not you?

If sometime, why not now?

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